

1891

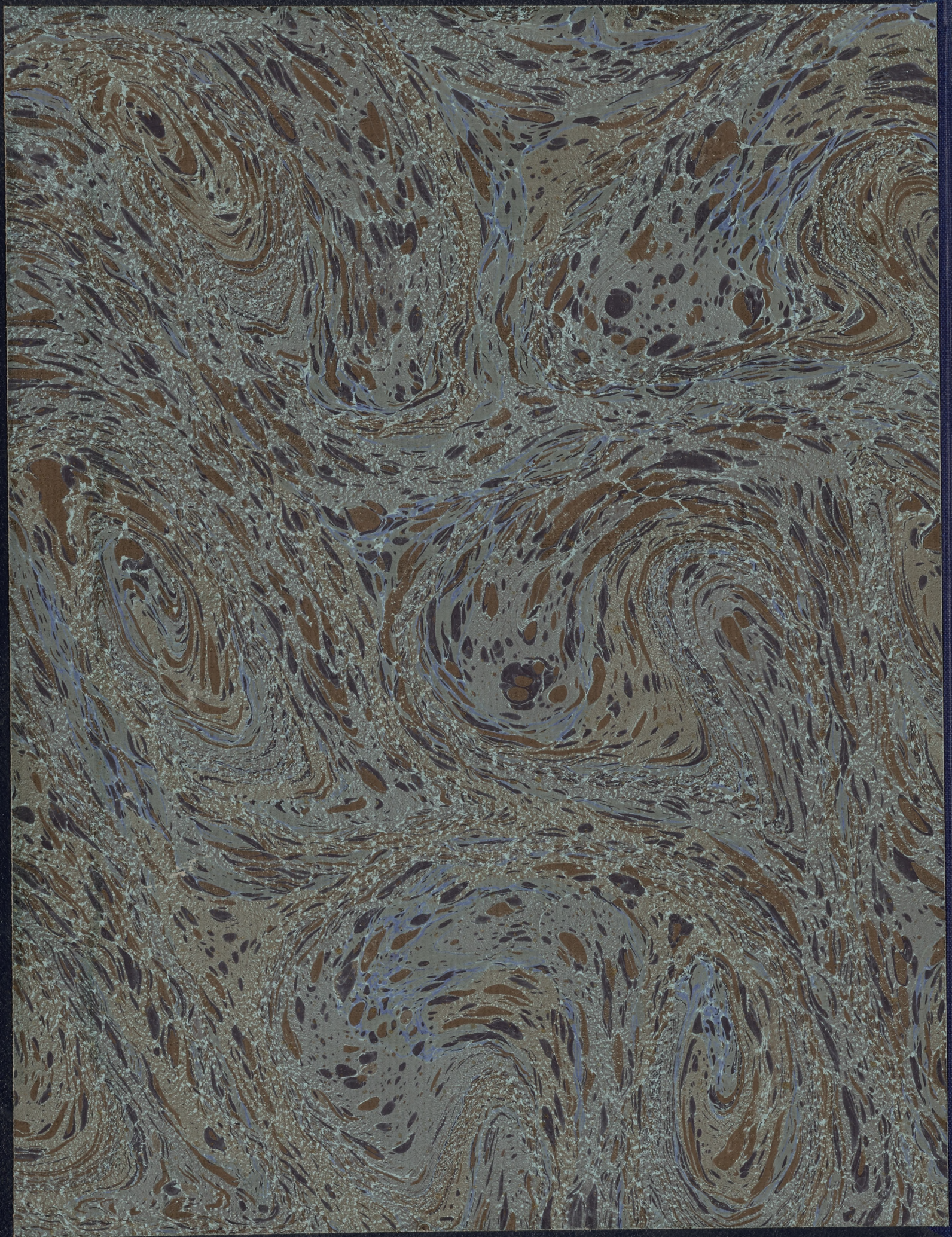
1891

# Tales & Traditions

1891

1891







TALES AND TRADITIONS

CONTRIBUTORS TO  
VOLUME VI

W. E. CARTER

J. B. deC. M. SAUNDERS

Warren L. BOSTICK

Elbridge BEST

William A. REILLY

Ian W. MONIE

Robert S. STONE

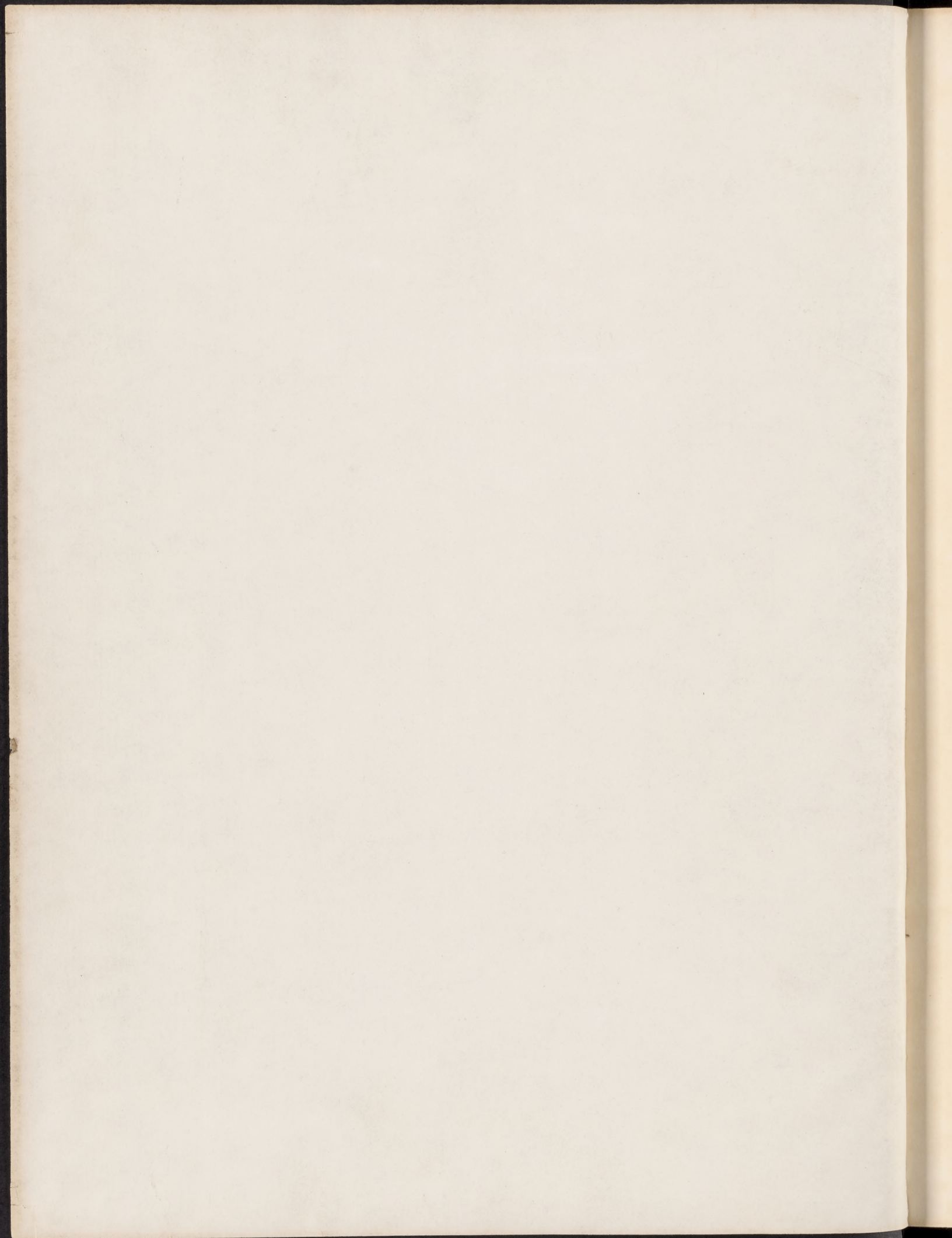
Albert H. ROWE

William R. LYONS

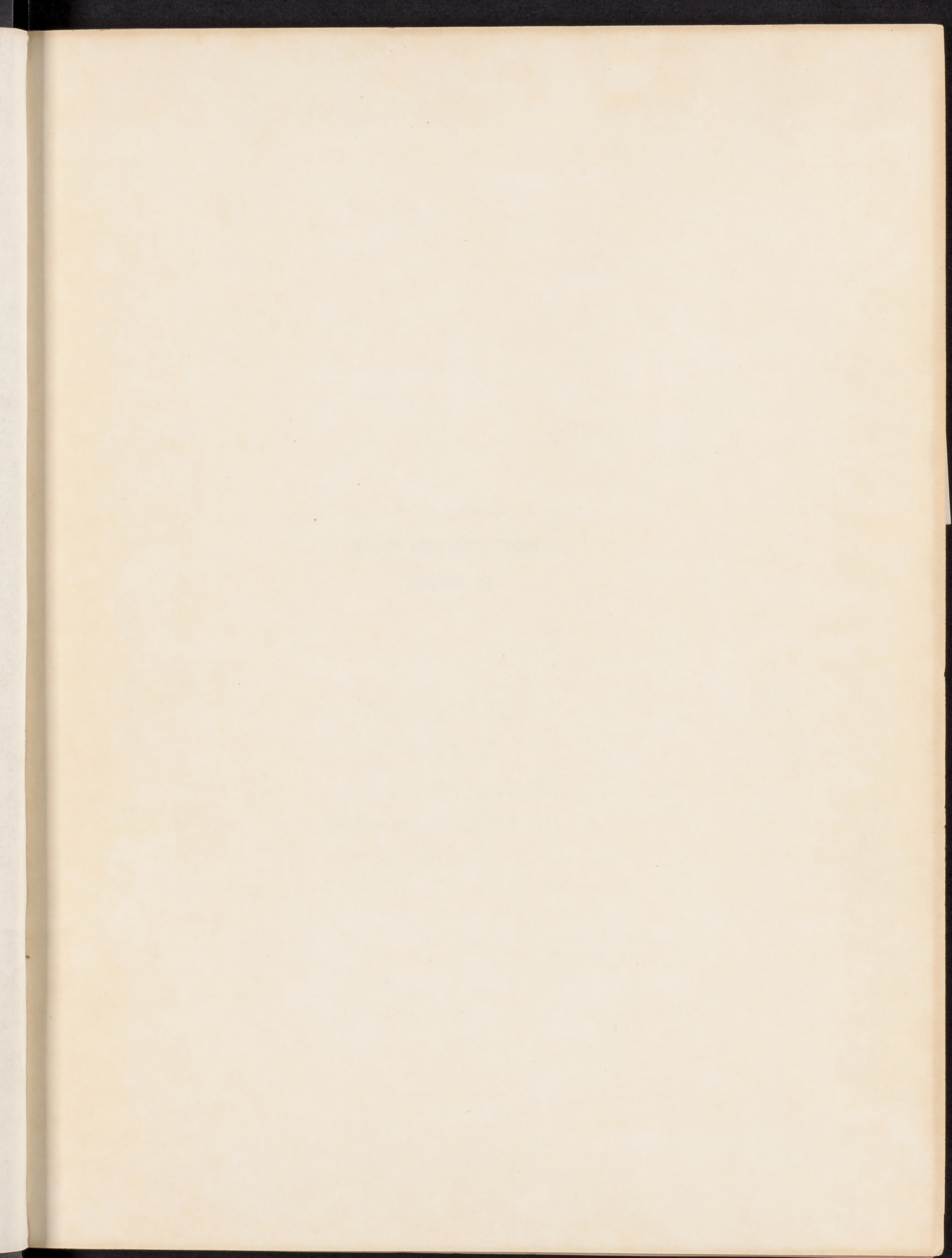
Bean SUMMERS

Dorothy LOWE















TALES AND TRADITIONS

VOLUME VI



TALES AND TRADITIONS

VOLUME VI



The material in this volume  
was collected and sponsored by

THE ALUMNI FACULTY  
ASSOCIATION  
OF THE SCHOOL OF MEDICINE  
UNIVERSITY OF CALIFORNIA  
SAN FRANCISCO



The material in this volume  
was collected and sponsored by

THE ALUMNI FACULTY  
ASSOCIATION  
OF THE SCHOOL OF MEDICINE  
UNIVERSITY OF CALIFORNIA  
SAN FRANCISCO



# TABLE OF CONTENTS

Mosaic Bequest	W. E. Carter J. B. deC. M. Saunders	1
Pathology Department	Warren L. Bostick	4
Chancellor Saunders	(Editorial)	12
Dr. Carter Honored	(Editorial)	13
Crucial Editorial	California & Western Medicine, Feb. 1926	14
Base Hospital No. 30	Elbridge Best	16
Kerrydale and William J. Kerr	(Editorial)	19
Radioisotopes	William A. Reilly	20
Department of Anatomy	Ian W. Monie	21
Medicine in Surabaja	William A. Reilly	23
Department of Radiology	Robert S. Stone	24
Journal, American Medical Association		25
Reminiscences of U. C. School of Medicine	Albert H. Rowe	26
Mammary-stimulating Hormones	William R. Lyons	28
Laguna Honda Hospital	Summers, Bean	29
History of Medicine in Pictures	Gift of Parke Davis & Co.	30
The Dean's Crest	(Editorial)	31
Agnes Terry	Dorothy Lowe	32



# TABLE OF CONTENTS

1	W. E. Carter	Mosaic Request
2	J. B. Dec, M. Saunders	
3	Warren L. Hostick	Pathology Department
4	(Editorial)	Chancellor Saunders
5	(Editorial)	Dr. Carter Honored
6	California & Western	Critical Editorial
7	Medicine, Feb. 1926	
8	Elbridge Best	Base Hospital No. 30
9	(Editorial)	Kerrydale and William J. Kerr
10	William A. Kelly	Radioscopes
11	Ian W. Monte	Department of Anatomy
12	William A. Kelly	Medicine in Surgery
13	Robert S. Stone	Department of Radiology
14		Journal, American Medical Association
15	Albert H. Rowe	Reminiscences of U. C. School of Medicine
16	William R. Lyons	Mammary-stimulating Hormones
17	Sumner, Bean	Laguna Honda Hospital
18	Gift of Parkes Davis & Co.	History of Medicine in Pictures
19	(Editorial)	The Dean's Guest
20	Dorothy Lowe	Agnes Terry



MOSAICS BEQUEST



MOSAICS REQUEST



115 Belgrave  
San Francisco 17, California  
March 12, 1964

John B. deC. M. Saunders, M. D.  
Chancellor and Librarian  
University of California Medical Center  
San Francisco 22, California

Dear Doctor Saunders:

It would give me great pleasure to present to the Medical Center Historical Room a series of marble mosaics from among a number made by me, avocationally, over the last few decades.

These mosaics have medical pertinence and allusions, and I hope they may be of value among the many medical artifacts already in your valuable collection. The making of them has afforded me much satisfaction for three or four decades; and I am hopeful that they may be of interest to the many young men and women under your tutelage.

The list offered is:

1. Kipling's terse formula for learning
2. Jenner's famed aphorism
3. Homeric allusion to universality
4. Bacchus
5. Pastoral Health
6. Bernard Shaw--food faddist
7. Einstein--innovator
8. The Chef--dietician's right arm
9. The Sower
10. Tragic Drama of World War II

Sincerely yours,

William E. Carter, M. D.



115 Belgrave  
San Francisco IV, California  
March 12, 1964

John R. dec. M. Sanders, M. D.  
Chancellor and Librarian  
University of California Medical Center  
San Francisco 22, California

Dear Doctor Sanders:

It would give me great pleasure to present to the Medical Center  
Historical Room a series of medical mosaics from among a number made  
by me, avocationally, over the last few decades.

These mosaics have medical pertinence and allusions, and I hope they  
may be of value among the many medical artifacts already in your  
valuable collection. The making of them has afforded me much satis-  
faction for three or four decades; and I am hopeful that they may be  
of interest to the many young men and women under your tutelage.

The list offered is:

1. Kipling's terse formula for learning
2. Jenner's famed aphorism
3. Homer's allusion to universality
4. Bachus
5. Pastoral Health
6. Bernard Shaw--food faddist
7. Einstein--innovator
8. The Chief--dietician's right man
9. The Sower
10. Tragic Drama of World War II

Sincerely yours,

William R. Carter, M. D.



UNIVERSITY OF CALIFORNIA  
SAN FRANCISCO MEDICAL CENTER

OFFICE OF THE ~~RECEIVED~~  
CHANCELLOR

March 6, 1964

Doctor William E. Carter  
115 Belgrave Avenue  
San Francisco 17, California

Dear Doctor Carter:

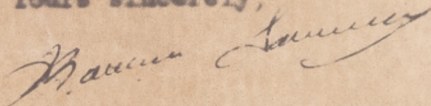
No mere formality prompts my writing you to acknowledge your gift of mosaics to the University of California--San Francisco Medical Center Library.

I address you as colleague and as a distinguished and indefatigable member of the Alumni Association of the School of Medicine. On behalf of all who shall chance upon your mosaics in one or another appropriate area of this Medical Center, I thank you for these unique gifts. You are most generous to relinquish them to our care and we anticipate enthusiastic response when they are put on display.

Throughout your many years of association with this Campus of the University, you have contributed in both time and tangibles to our growth and progress. I take this opportunity to again express appreciation for your loyal support.

Kindest personal regards,

Yours sincerely,



J.B.deC.M. Saunders, M.D.  
Chancellor

JBS:gcm







UNIVERSITY OF CALIFORNIA  
SAN FRANCISCO MEDICAL CENTER

UNIVERSITY OF CALIFORNIA HOSPITALS

January 29, 1964

W. E. Carter, M.D.  
Alumni-Faculty Association  
University of California  
School of Medicine  
San Francisco 22, California

*Recollections  
of the Dept Pathology  
by  
Warren L Bostick*

Dear Dr. Carter:

Following your suggestion and in response to your stimulation, I am taking this occasion to recall several of the personalities and events that have occurred in the Department of Pathology here at the campus of the University of California Medical School since I first arrived, originally as a sophomore medical student in September, 1936. Since I received my medical school training here and continued on the campus through my complete post-graduate program in the specialty of Pathology, I had an opportunity to see many of the men in the department in action and to know them particularly well.

When I was a student Dr. Charles L. Connor was then the Professor of Pathology and Chairman, having been Professor since 1930. However, Dr. Granville Rusk, who had been the preceding Chairman and Professor of Pathology was still giving an occasional lecture to the medical class and appeared before us during the course.

A few remarks about Dr. Rusk might be of interest. He had been the head of the Department of Pathology at the Mt. Zion Hospital and therefore, for many years, was clinical professor and headed both the department in that hospital as well as the one here at the medical center. In fact, his brief tenure as Chairman of the Department occurred, as I recall, when he was not full-time, and was infact still in the clinical professor status. He was not well known to our class but when we did see him we encountered a small, rather elderly, bald man, at the time, who was quick of step, rather brusque and very alert. He always seemed quite preoccupied, and was not the type of person who would stop anyone in the hall to generally talk about the time of day or the problem of local gossip. One of his most striking characteristics as a lecturer was his habit of starting the lecture at exactly ten minutes after the hour, irrespective of the number of people present in the room, and as the hour drew to an end, to pull out his gold watch to be certain that he ended on time. The startling factor, however, was his constant habit of ending the lecture by turning slowly on his heels and continuing the talk, concluding his last sentence as he walked out the door. His lectures were factual and well organized but were given in a monotonous tone and in a relatively low voice. He was certainly not a man to inspire anyone to go into Pathology, and certainly



UNIVERSITY OF CALIFORNIA  
SAN FRANCISCO MEDICAL CENTER

January 22, 1961

UNIVERSITY OF CALIFORNIA HOSPITALS

W. E. Carter, M.D.  
Alumni-Faculty Association  
University of California  
School of Medicine  
San Francisco 22, California

Dear Dr. Carter:

Following your suggestion and in response to your invitation, I am raising this question to recall several of the early medical events that have occurred in the Department of Pathology here at the campus of the University of California Medical School since I first arrived, originally as a sophomore medical student in September, 1930. Since I received my medical school training here and continued on the campus through my complete post-graduate program in the specialty of Pathology, I had an opportunity to see many of the men in the department in action and to know them particularly well.

When I was a student Dr. Charles L. Connor was then the Professor of Pathology and Chairman, having been Professor since 1930. However, Dr. Granville Bush, who had been the preceding Chairman and Professor of Pathology was still giving an occasional lecture to the medical class and appeared before us during the course.

A few remarks about Dr. Bush might be of interest. He had been the head of the Department of Pathology at the Mt. Zion Hospital and therefore, for many years, was clinical professor and headed both the department in that hospital as well as the one here at the medical center. In fact, his first tenure as Chairman of the Department occurred, as I recall, when he was not well-known, and was almost still in the clinical professor status. He was not well known to our class but when we did see him we encountered a really rather elderly, bald man, at the time, who was quite of age, rather stout and very kind. He always seemed quite preoccupied, and was not the type of person who would stop anyone in the hall to generally talk about the time of day or the problem of local gossip. One of his most striking characteristics as a lecturer was his habit of starting the lecture at exactly ten minutes after the hour, irrespective of the number of people present in the room, and as the hour drew to an end, to pull out his gold watch to be certain that he ended on time. The startling factor, however, was his constant habit of ending the lecture by turning away on his heels and continuing the talk, concluding his last sentence as he walked out the door. His lectures were factual and well organized but were given in a monotonous tone and in a relatively low voice. He was certainly not a man to inspire anyone to go into Pathology, and certainly



To: W. E. Carter, M.D.

1/29/64

-2-

any interest one might have had in that direction was markedly dampened if one visited him in his office. His office and desk were an utter mess, numerous papers, everything stacked all around the room, including specimens, unfinished slides, and other paraphernalia. In spite of this great appearance of confusion his opinion was much sought after as an interpreter of slides. His diagnosis was considered accurate and reliable, the only thing that irritated the clinicians was the fact that he often took a long time to give them the report.

The main professor I knew, was Charles Connor, who arrived in the department in 1928 as executive head and became a full professor in 1930 and died in 1941. He was the son of a coal miner, was a dogged, determined self-made man with very heavy frame, rather silent and gruff, but beneath this a very fair, approachable person. One thing that particularly impressed his staff was his remarkable memory for both the literature and for past autopsy cases. He had thick black hair, weighed approximately 215 pounds, and was about five foot ten, to eleven, in size.

He ran a good department but without much spirit since he did not relate easily with the rest of his staff. He probably was closest to Dr. James Reinhart. The resident staff admired him greatly and made particular efforts to attend his autopsies, which he did occasionally. He was a good surgical pathologist and of course had his special field of interest in the classification of endothelioma tumors.

When he was professor the department was on the second floor of the old medical school building, and every afternoon at three o'clock the department would stop to go into the main laboratory, and generally relax. During this time Dr. Connor was pleasant and a reserved but cordial host. In the opinion of other department chairmen of the time Dr. Connor was admired and respected, and hence he was able to build the department well and it was during this tenure that Dr. Reinhart, Dr. Jesse Carr, Dr. Perry, Dr. Buck came into the department.

In the last years of his life Dr. Connor had episodic difficulties with drinking. This resulted in several noticeable absences from his duties; however, he seemed to come right back quickly and to reassume his position with very little evidence of disturbance. This phase of the department development, however, was difficult, since it was obvious that the department was not being properly guided. One day I came to the department to hear that Dr. Connor had died suddenly, and since he was unattended at the time he turned out to be a coroner's case. We never heard the precise cause of death.

Dr. James Reinhart was the professor I knew particularly well. You will recall he graduated from this University, went for awhile to the Massachusetts General Hospital and returned as an Assistant in Pathology in 1927. He progressed up the chairs to become Professor of



1/29/61

-2-

any interest one might have had in that direction was markedly dampened if one visited him in his office. His office and desk were an utter mess, numerous papers, everything stacked all around the room, including specimens, unfinished slides, and other paraphernalia. In spite of this great appearance of confusion his opinion was much sought after as an interpreter of slides. His diagnosis was considered accurate and reliable, the only thing that irritated the clinicians was the fact that he often took a long time to give them the report.

The main professor I knew, was Charles Connor, who arrived in the department in 1928 as executive head and became a full professor in 1930 and died in 1941. He was the son of a coal miner, was a dogged, determined self-made man with very heavy frame, rather silent and gruff, but beneath this a very fair, approachable person. One thing that particularly impressed his staff was his remarkable memory for both the literature and for past autopsy cases. He had thick black hair, weighed approximately 215 pounds, and was about five foot ten, to eleven, in size.

He ran a good department but without much spirit since he did not relate easily with the rest of his staff. He probably was closest to Dr. James Reinhardt. The resident staff admired him greatly and made particular efforts to attend his autopsies, which he did occasionally. He was a good surgical pathologist and of course had his special field of interest in the classification of endothelioma tumors.

When he was professor the department was on the second floor of the old medical school building, and every afternoon at three o'clock the department would stop to go into the main laboratory, and generally relax. During this time Dr. Connor was pleasant and a reserved but cordial host. In the opinion of other department chairmen of the time Dr. Connor was admired and respected, and hence he was able to build the department well and it was during this tenure that Dr. Reinhardt, Dr. Jesse Carr, Dr. Perry, Dr. Buck came into the department.

In the last years of his life Dr. Connor had episodic difficulties with drinking. This resulted in several noticeable absences from his duties; however, he seemed to come right back quickly and to resume his position with very little evidence of disturbance. This phase of the department development, however, was difficult, since it was obvious that the department was not being properly guided. One day I came to the department to hear that Dr. Connor had died suddenly, and since he was unattended at the time he turned out to be a coroner's case. We never heard the precise cause of death.

Dr. James Reinhardt was the professor I knew particularly well. You will recall he graduated from this University, went for awhile to the Massachusetts General Hospital and returned as an Assistant in Pathology in 1927. He progressed up the chairs to become Professor of



6

To: W. E. Carter, M.D.

1/29/64

-3-

Pathology in 1942, replacing Charles Connor. I need hardly review in detail Dr. Reinhart, however, I might remark about him as a person. He was a small man with gentle features, quiet, and one to keep his own opinions to himself. He seldom got angry and even when angry didn't appear very strongly so. He was a superb politician in committees and certainly one of his strong characteristics, patience, was particularly effective under those circumstances. He hated to make decisions and tended to let time answer most of the problems. The decisions he did make in most areas had a lot of heart in them and one always felt very safe if one was in trouble and had to rely on Reinhart to make a decision - he was most understanding.

The house officers liked him very much and considered him approachable and friendly although rather preoccupied. His main diagnostic strength was in the diagnosis of lymph node problems and blood vessels; however, his general ability in all tissues was striking and the resident staff went to him frequently for very valid opinions.

As a member of his department I found him most cordial but he would never bring up problems for discussion of his own, and if one went in for opinions he would give them rather reluctantly and the conversation would slowly come to a stop unless one kept up the discussion on one's own side. One general impression was that he was a very gentle, shy person basically, but with a firm determination to do a good job. I would say he did a good job and that he ran a cordial, well integrated department that had a minimum of internal tensions and a maximum of freedom for the development of independent research trends. Certainly in that regard he was most understanding and generous to his young department members.

Being a good medical school politician, the department thrived under him, increased space was obtained and he increased the size of the staff. Since he was active in the Department of Public Health, being the Chairman of the Public Health Advisory Committee, plus interests in government, he obtained early generous outside research funds, both in his own field of interest, rheumatic fever, and also that for other members of the staff. He brought into the department Stuart Lindsay, Henry Moon, Jack Crane, and several others who have shown much drive and much basic contribution to Pathology. In the later years in the department he seemed to age rather rapidly, added weight, and by 1952 appeared much older than his age chronologically. None of us were aware that during the last year he needed nitroglycerin for angina pectoris. I believe it was 1954 that I came to the department one morning to hear that he had dropped dead from a coronary occlusion while crossing the street from Mills Hospital, going towards his car.

Jackson Crane. Jack received his M.D. in 1945 and went immediately into Pathology, being in our department working up through our regular training program to the residency. After that he stayed on as an Instructor



Pathology in 1942, replacing Charles Connor. I need hardly review in detail Dr. Reinhardt, however, I might remark about him as a person. He was a small man with gentle features, quiet, and one to keep his own opinions to himself. He seldom got angry and even when angry didn't appear very strongly so. He was a superb politician in committee and certainly one of his strong characteristics, patience, was particularly effective under those circumstances. He hated to make decisions and tended to let time answer most of the problems. The decisions he did make in most areas had a lot of heart in them and one always felt very safe if one was in trouble and had to rely on Reinhardt to make a decision - he was most understanding.

The house officers liked him very much and considered him approachable and friendly although rather preoccupied. His main diagnostic strength was in the diagnosis of lymph node problems and blood vessels; however, his general ability in all diseases was striking and the resident staff went to him frequently for satisfactory opinions.

As a member of his department I found him most cordial but he would never bring up problems for discussion of his own, and if one went in for opinions he would give them rather reluctantly and the conversation would slowly come to a stop unless one kept up the discussion on one's own side. One general impression was that he was a very gentle, shy person basically, but with a firm determination to do a good job. I would say he did a good job and that he ran a cordial, well integrated department that had a minimum of internal tensions and a maximum of freedom for the development of independent research trends. Certainly in that regard he was most understanding and generous to his young department members.

Being a good medical school politician, the department thrived under him, increased space was obtained and he increased the size of the staff. Since he was active in the Department of Public Health, being the Chairman of the Public Health Advisory Committee, plus interests in government, he obtained early generous outside research funds, both in his own field of interest, rheumatic fever, and also that for other members of the staff. He brought into the department Stuart Lindsay, Henry Moon, Jack Crane, and several other who have shown much drive and much basic contribution to Pathology. In the later years in the department he seemed to age rather rapidly, added weight, and by 1952 appeared much older than his age chronologically. None of us were aware that during the last year he needed nitroglycerin for angina pectoris. I believe it was 1951 that I came to the department one morning to hear that he had dropped dead from a coronary occlusion while crossing the street from Mills Hospital, going towards his car.

Jack Crane, M.D. in 1945 and went immediately into Pathology, being in our department working up through our regular training program to the residency. After that he stayed on as an Instructor



To: W. E. Carter, M.D.

1/29/64

-4-

and then Assistant Professor. He soon became very interested in surgical pathology. He had little or no interest in clinical laboratories but was instead a great morphologist. He was progressing very well in the department and was well liked, and I believe had just reached the Associate Professorship, when he was offered a position in the newly enlarging medical school in Portland, namely, the University of Oregon. Much to the distress of the department but certainly to his own personal advantage, he accepted the Chairmanship and heads anatomical pathology there in that university. In the University of Oregon Clinical Pathology is not taught by the Department of Pathology.

Jack Crane was a very handsome young man, dashing, quick witted and well liked. He had jet black hair and olive skin, very uniform features, enjoyed skiing, hiking and mountaineering. In the areas that he enjoyed working his decisions were quick, he was energetic, and a good administrator. However, he enjoyed having fun and relaxing and sometimes was lax in administrative duties if there was something around that was more fun. He was definitely 'one of the boys' and even as a young professor was unusually close to the house and resident staff. With his great love of surgical pathology he was the darling of the surgeons and shared his academic appointment with the Department of Surgery. As a teacher he was superior. His lectures were much admired and his audience always large. In contrast Dr. Reinhart was quiet, withdrawn, logical but not inspiring. Jack was concise, well prepared, with excellent emphasis and good oratory flair.

Crane was best in problems of the microscope and did not have any particular interest in research although he did not avoid it, he just found the surgical pathology part in the hospital all consuming and dynamic. The department lost a fine young head of surgical pathology when he decided to move to other territory.

Finally, may I say a word or two about Leonard Buck. Leonard had been here many years when I arrived, apparently having graduated from the University of California and starting in pathology in 1926. He never was academically inclined in the sense of doing research or being an eloquent teacher. He was however, an unusually loyal supporter of the museum in the Department of Pathology. He was its curator and built the museum up from nothing to an organization of good reputation and great depth. He had an interesting side that few know about, namely, that he was financially very successful, not in medicine but as an outside investor and entrepreneur. During the middle of medical school he went to China and invested in oil and managed to gradually parlay that money and investment in other investments in California into a considerable fortune. Hence, his participation in the Department of Pathology was truly one of love of pathology and interest in surgical pathology and anatomy. He was one who routinely demonstrated the museum specimens to the students. He was a



1/29/51

-1-

and then Assistant Professor. He soon became very interested in surgical pathology. He had little or no interest in clinical laboratories but was instead a great morphologist. He was progressing very well in the department and was well liked, and I believe had just reached the Associate Professorship when he was offered a position in the newly enlarging medical school in Portland, namely, the University of Oregon. Much to the distress of the department but certainly to his own personal advantage, he accepted the Chairmanship and heads anatomical pathology there in that university. In the University of Oregon Clinical Pathology is not taught by the Department of Pathology.

Jack Crane was a very handsome young man, dashing, quick witted and well liked. He had jet black hair and olive skin, very uniform features, enjoyed riding, hiking and mountaineering. In the areas that he enjoyed working his decisions were quick, he was energetic, and a good administrator. However, he enjoyed having fun and relaxing and sometimes was lax in administrative duties if there was something around that was more fun. He was definitely one of the boys and even as a young professor was unusually close to the house and resident staff. With his great love of surgical pathology he was the darling of the surgeons and shared his academic appointment with the Department of Surgery. As a teacher he was superior. His lectures were much admired and his audience always large. In contrast Dr. Reinhardt was quiet, withdrawn, logical but not inspiring. Jack was concise, well prepared, with excellent emphasis and good oratory.

Crane was best in problems of the microscope and did not have any particular interest in research although he did not avoid it, he just found the surgical pathology part in the hospital all consuming and dynamic. The department lost a fine young head of surgical pathology when he decided to move to other territory.

Finally, say I say a word or two about Leonard Buck. Leonard had been here many years when I arrived, apparently having graduated from the University of California and starting in pathology in 1926. He never was academically inclined in the sense of doing research or being an eloquent teacher. He was however, an unusually loyal supporter of the museum in the Department of Pathology. He was the curator and built the museum up from nothing to an organization of good reputation and great depth. He had an interesting side that few knew about, namely, that he was financially very successful, not in medicine but as an outside investor and entrepreneur. During the middle of medical school he went to China and invested in oil and managed to gradually parlay that money and investment in other investments in California into a considerable fortune. Hence, his participation in the Department of Pathology was truly one of love of pathology and interest in surgical pathology and anatomy. He was one who routinely demonstrated the museum specimens to the students. He was a



To: W. E. Carter, M.D.

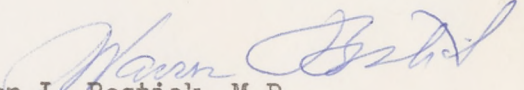
1/29/64

-5-

soft spoken, sincere lecturer who always had a particular, specific story about each specimen in the museum and remembered well the details and circumstances that made the specimen worthy of museum membership. This sincerity and gentle low pressure humor was a delight to the students and was very effective in fixing in their memories the importance of the specific point being raised. Leonard Buck stayed constantly in his position in the museum throughout his entire professional career and died of natural causes in about 1958.

I trust these few vignettes of the personalities of the past members of the Department of Pathology may be of use to you in your endeavor.

Sincerely yours,



Warren L. Bostick, M.D.  
Professor of Pathology,  
Director of Clinical Laboratories

WLB:kv



To: W. E. Carter, M.D.

1/29/64

-2-

self spoken, sincere lecturer who always had a particular, specific story about each specimen in the museum and remembered well the details and circumstances that made the specimen worthy of museum membership. This sincerity and gentle low pressure humor was a delight to the students and was very effective in fixing in their memories the importance of the specific point being raised. Leonard Buck stayed constantly in his position in the museum throughout his entire professional career and died of natural causes in about 1958.

I trust these few vignettes of the personalities of the past members of the Department of Pathology may be of use to you in your endeavor.

Sincerely yours,

Warren L. Bostick, M.D.  
Professor of Pathology  
Director of Clinical Laboratories

WLB:kv





DR. CHARLES CONNER  
circa 1940



DR. JAMES RINEHART  
circa 1955



DR. LEONARD BUCK  
circa 1958



DR. JACKSON CRANE  
circa 1948



DR. JAMES RIMMERT  
circa 1928

DR. CHARLES COWLEY  
circa 1910

Jackson Creek  
a. 1/2 mi. S. of  
Sept 1908

St. Leonard Port  
Settled Sept  
Sept 1908

DR. JACKSON CRANE  
circa 1918

DR. EDWARD BUCK  
circa 1928





Dr Louis D Greenberg—  
circa 1942



Dr. Stuart Lindsay  
circa 1945



Dr Warren Bostick  
1944



Dr Isabelle Parry  
1950



10  
Lindsey

Greenberg

Dr. Stewart Lindsay  
circa 1945

Dr. Louis B. Greenberg  
circa 1945

Dr. Isabelle Perry  
1950

Dr. Warren Postlock  
1944





J.F. Rinehart M.D. with student in Soph. Pathology laboraory  
old medical school bldg. 1937



Coffee break, department of Pathology, 1937, old medical school bldg.  
left, Rinehart, then L.D. Greenberg, others tehcnical staff



Taken by the author, 1937

Department of Pathology, old medical school bldg.

J.F. Rinehart M.D. with student in Soph. Pathology laboratory  
old medical school bldg. 1937

1937

Left, Rinehart, then L.D. Greenberg, others technical staff.  
Coffee break, department of Pathology, 1937, old medical school bldg.



## Continues as Professor

## Appointed Chancellor: Dr. Saunders



Chancellor Saunders

Dr. J. B. deC. M. Saunders, Provost of the medical center since 1958, has been appointed Chancellor, University President Clark Kerr announced last month.

He will continue to serve as chief academic and administrative officer here, but his title is now the same as that of other chief campus officers in the University of California.

In making the announcement, President Kerr said: "Dr. Saunders' appointment as

Chancellor appropriately recognizes his own contributions to the University and the San Francisco Medical Center, as well as the high stature of the campus itself as an academic center in the health sciences."

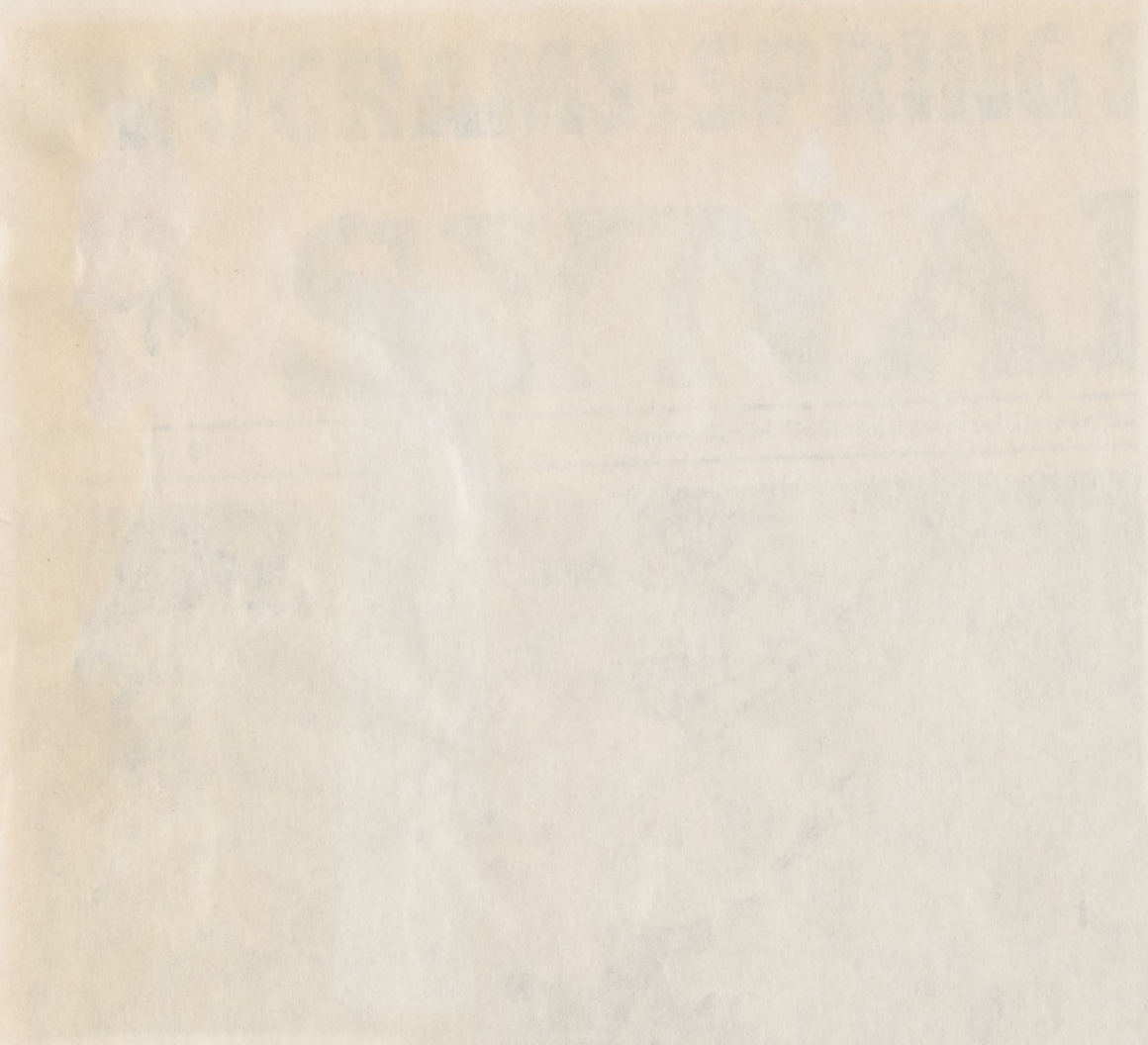
Dr. Saunders has been a member of the San Francisco faculty of the University since 1931. He has made distinguished contributions to research and scholarship in anatomy, medical history, surgery, and the mechanics of locomotion.

Born in Grahamstown, South Africa, July 2, 1903, Dr. Saunders studied at St. Andrew's College and Rhodes University College in South Africa before earning his medical degrees at the University of Edinburgh in 1925. He is a Fellow of the Royal College of Surgeons of Edinburgh and a member of numerous American and foreign medical and scientific organizations.

Dr. Saunders was chairman of the department of anatomy from 1938 until his appointment as Dean of the School of Medicine in 1956. He served as Dean until the appointment of Dr. William O. Reinhardt to that position last year. Dr. Saunders continues to serve as professor of anatomy, lecturer in medical history and bibliography, and librarian of the Medical Center.

He and Mrs. Saunders, the former Alison Maxwell Wood, live at 1412 Willard Street, San Francisco. They have two daughters, Alison (Mrs. Alyn Duxbury), and Margery (Mrs. Donald Hellmann).





... 1911 ...  
... Those Who ...  
... And This ...  
... 1911 ...



#### DR. CARTER HONORED

An exhibit honoring Dr. William E. Carter on his eightieth birthday will be on display in the Millberry Union lobby through October 2. It is a singularly appropriate exhibit, consisting of the collection of documents and books assembled by Dr. Carter in his role as "guardian of the traditions of the School of Medicine."

Dr. Carter, who has been associated with the Medical Center since 1919 and was Director of the Outpatient Department from 1929 until 1950, has devoted many years to recording the history of the School of Medicine from its birth in 1864 to the present day. He has collected publications, photographs, and other memorabilia; obtained the personal recollections of many faculty members, past and present, which now constitute several manuscript volumes entitled "Tales and Traditions;" and assembled first editions of

many books written by faculty members (including the classic text in pediatrics on which he and Dr. Langley Porter collaborated). Two special volumes are devoted to the school's participation in the two World Wars, and one to original contributions by Dr. Carter himself.

The collection has been sponsored by the Alumni-Faculty Association (which Dr. Carter has long served as Councillor-at-large), and is now part of the Medical Center Library archives.

*From the Bulletin,  
Alumni Faculty Association.*

*1963.*



81

Natural Fact of infection currently being held in Moscow, Leningrad, and Tbilisi, USSR. This course is given almost entirely by Russian scientists for an audience comprising selected public health workers responsible for control of endemic diseases in a number of countries. Dr. Andy participated in a similar conference in 1960.

#### FILM SCHEDULE

The film programs to be presented by the Union Film Committee during September and October are listed below. Each program consists of a feature film and a special and interesting short subject. Admission to the 7:30 p.m. showings in the Medical Sciences Auditorium is 25 cts.; children under 12 are admitted free.

September 21 - *Girl in Black* (Greece).

September 28 - *From the Ter-*

#### W.H.O. TO HEAR DR. CULLEN

Dr. Stuart C. Cullen, Chairman of the Department of Anesthesia, will lecture this month at the World Health Organization's international course in anesthesiology, a program he established for the WHO in 1960. The course provides anesthesia training for physicians from many parts of Europe, Asia, and the Near East. Dr. Cullen will subsequently visit the United Arab Republic, Lebanon, Iraq, and Iran, to survey teaching facilities in anesthesia as a WHO

ROOM 2

OFFICERS

FRANCIS  
President

CARL E.  
Vice-President  
(Northern)

W. EUGENE  
Vice-President  
(Southern)

IONE R.  
Secretary

SAMUEL  
Treasurer

WILLIAM  
Councilor

EDWIN G.  
Councilor

HILLIARD  
Councilor

JACK D. I.  
Editor

FRANCES  
Executive

From the Publisher  
American Society of Anesthesiologists  
1968



14  
ALUMNI-FACULTY ASSOCIATION

SCHOOL OF MEDICINE  
UNIVERSITY OF CALIFORNIA  
SAN FRANCISCO 22, CALIFORNIA

ROOM 244, MILLBERRY UNION

MONTROSE 4-3688

OFFICERS: 1963-64

FRANCIS A. SOOY  
President

CARL E. ANDERSON  
Vice-President  
(Northern Area)

W. EUGENE STERN  
Vice-President  
(Southern Area)

IONE R. RAILTON  
Secretary

SAMUEL R. LEAVITT  
Treasurer

WILLIAM E. CARTER  
Councilor-at-Large

EDWIN G. CLAUSEN  
Councilor

HILLIARD J. KATZ  
Councilor

JACK D. LANGE  
Editor

FRANCES M. CARTER  
Executive Secretary

*a crucial Editorial*

*" "*

The attached copy of  
a page from the journal of the  
California Medical Association  
under the date of February 1926,  
bears an editorial of great im-  
port - It started a movement to  
gain support of the Medical School  
of the university.

For further details, see the  
various recordings on tape of  
various men who recall the  
events of the time.



ALUMNI FACULTY ASSOCIATION

STUDENT OF THE  
UNIVERSITY OF CALIFORNIA  
LEAVE OF ABSENCE

DATE OF DEPARTURE

DATE OF RETURN

NAME

CLASS

DEPARTMENT

REASON

DATE

TIME

PLACE

REMARKS

DATE

TIME

PLACE

REMARKS

DATE

TIME

PLACE

REMARKS

W. L. GILBERT

*[Signature]*

The undersigned hereby

certifies that the person

named above is a student

of the University of California

and is entitled to leave of absence

for the purpose of

the study of

for further study

and is hereby

recommended by the

faculty of the



Good bibliographies are valuable, at least in original research work and in certain classes of reviews. On the other hand, there is nothing more harmful than an inaccurate or incomplete collection of alleged references bearing upon a subject. The actual checking up of quoted references from actual papers has long since established the fact that fully 50 per cent of bibliographic references attached to manuscripts are incorrectly applied or incompletely made.

CALIFORNIA AND WESTERN MEDICINE has neither the funds nor the personnel to do this tedious difficult work for authors. If the majority of the members who own the magazine wish bibliographies of the right kind, and the California Medical Association will so instruct the editor and provide funds for a competent librarian to do the work, we will be very glad to add that service to the magazine.

This matter will be one of the points mentioned in the editor's report to the California Medical Association at its 1926 session. Those who wish changes made in the policies that are now being carried out under council rulings should make their wishes known by letters to the secretary of the California Medical Association or by instructing their delegates to the 1926 convention to act as they wish them to act in this particular question.

#### WHO NEXT?

Minnesota wins and California loses in the transfer of Walter C. Alvarez from the University of California Medical School and Hooper Foundation to the Mayo organization.

Alvarez undoubtedly will be happier and more usefully productive in the stimulating atmosphere and more comfortable surroundings that characterize Mayo's or any other intelligently conducted medical center. But what about California's loss? Will the University promptly fill this important vacancy, or will they save money by leaving it vacant as they have other important positions in the San Francisco departments of the medical faculty?

George Whipple, an outstanding pathologist and medical teacher of world-wide reputation, was allowed to leave the deanship of our State university some years ago because of stupid parsimony and insecurity of tenure called "economy." The position has remained vacant since that time. Why Doctor L. S. Schmitt has been *Acting* Dean during these weary years is difficult to understand unless, as is now humorously stated, "*Acting*" has become a new pedagogic title in our State medical educational system. If Schmitt is worthy, he ought to be appointed Dean, and given the salary of the position; if he is not deserving, some one qualified should be called to this important position, given a decent salary, some security of tenure, and enough authority to perform some overdue surgery necessary to save a seriously ill but nevertheless much worthwhile patient.

Not only medical alumni of the University of California, but decent doctors, and many other loyal citizens everywhere, are becoming seriously disturbed over the lackadaisical management of

the San Francisco departments of this one time great medical school. This school is costing the people of California some millions of dollars annually. They ought to spend much more upon it and no doubt will do so when they see evidences of better use of what they are now supplying. The faculty still has the services of many splendid physicians and medical teachers who are doing all they can under conditions made difficult for somewhat obscure reasons. But that spirit of progress and team work which is the greatest asset any medical institution can have is not strikingly evident at the University of California Medical School. Under capable leadership, sound financing and the intelligent delegation of necessary authority, it can be, ought to be, and must be restored.

#### INTRAVENOUS USE OF DYES

Reports in the literature have indicated for some time the uncertain status of the dyes used intravenously in the treatment of certain infectious diseases. The recent discussion by Churchman (page 243), leaves the impression that the entire subject of intravenous dye therapy is handicapped by serious limitations and uncertainties. The factor of spontaneous recovery is rightly emphasized and should be taken more seriously into account with all therapeutic agents than it generally is. An important difficulty is the uncertain nature of septicemias themselves. No two seem to be alike. In this state of affairs it is obviously difficult to secure adequate controls for proper evaluation of the dye treatment. What appears to be a successful cure in one case may be entirely accidental as far as participation of the dye is concerned, and the result in another case is not predictable. In fact, the literature contains several reports of negative and even detrimental results.

A limitation to the dyes appears to be an alleged inability to attack hidden foci of infection. There is no reason to believe that such hypothetical foci are less permeable than the tissues in general, whose permeability to the dyes is claimed to be good. The lack of curative efficiency may or may not rest on this alleged difficulty. Other possibilities remain. For one thing, the dyes may, and probably do, produce effects other than those on micro-organisms. It is known that many agents may produce beneficial effects in clinical infections independently of antiseptic efficiency, or of their etiology. This seems to be true of the agents used in non-specific therapy, many of which are injected intravenously. For instance, typhoid vaccine is reported to be beneficial in rheumatic fever; and peptone, milk, plasma, foreign colloids, certain irritants, etc., are claimed to benefit both acute and chronic infectious diseases irrespective of the etiology.

The physical and chemical changes in the blood and tissues produced by agents used intravenously are important. The changes range from the just demonstrable to marked and probably explain the reactions, and even deaths that sometimes occur. The dyes that are advocated intravenously (gentian violet, mercurochrome, etc.), have not been investigated sufficiently from this standpoint, but if one



Ja  
Fe  
Ma

Apr  
May

CLIMATE AND WEATHER

The climate of the United States is very variable. It is determined by the position of the country, the extent of its territory, and the influence of the surrounding waters. The climate is generally temperate, but it varies greatly from north to south and from east to west. The climate is also affected by the seasons, and it is different in different parts of the country.

The climate of the United States is very variable. It is determined by the position of the country, the extent of its territory, and the influence of the surrounding waters. The climate is generally temperate, but it varies greatly from north to south and from east to west. The climate is also affected by the seasons, and it is different in different parts of the country.

The climate of the United States is very variable. It is determined by the position of the country, the extent of its territory, and the influence of the surrounding waters. The climate is generally temperate, but it varies greatly from north to south and from east to west. The climate is also affected by the seasons, and it is different in different parts of the country.

The climate of the United States is very variable. It is determined by the position of the country, the extent of its territory, and the influence of the surrounding waters. The climate is generally temperate, but it varies greatly from north to south and from east to west. The climate is also affected by the seasons, and it is different in different parts of the country.

The climate of the United States is very variable. It is determined by the position of the country, the extent of its territory, and the influence of the surrounding waters. The climate is generally temperate, but it varies greatly from north to south and from east to west. The climate is also affected by the seasons, and it is different in different parts of the country.



BASE HOSPITAL #30  
Notes from Elbridge Best

18

January 1. At Fort Mason, San Francisco

I am Post Exchange Officer

21. Orchestra practice. Leader Dr. Richards. My flute playing improves.

February 7. Ruggles ordered to New York. (X-Ray course)

13. Base 30 dance at the Palace Hotel

18. First GAS drill.

19. Rumor that we may be moving soon.

22. Informed that our orders have arrived.

27. Rumor that we go by boat.

28. Orders to have baggage ready by morning.

March 1. S.S. Great Northern is our ship. It is at the dock.

2. Went aboard at 10 P.M.

3. Ship pulled out into the stream at 9:30 A.M.

Sailed from San Francisco at 2 P.M.

10. Entered Panama Canal. Reached Colon 6:30 P.M.

American Zone DRY. Panama Zone wide open.

With ship captain Preston and Dr. Weeks, we saw the Panama Zone.

12. Fore on ship 2 P.M.

Architecture

15. Docked at Portsmouth. Saw Norfolk and was interested at Southern /

16. Off Atlantic City. Water, to wash deck, froze on deck.

17. Docked at Hoboken, 8:10 A.M. Ice Floes in the Hudson River.

Left ship at 3 P.M. Arrived at Camp Merritt at 6 P.M.

19. Given leave. Off to Wilmington, Del. to visit Bill & Rose Duggin, relatives.

22. Visited Dr. Olinski and Dr. J. Loeb at Rockefeller Hospital.

23. Visited Metropolitan Museum.

25. Visited lower New York.

27. Visited Dr. Nuguchi at Rockefeller.

29. Visited the Bronx Zoo and the Hippodrome.

30. Dined at "Browns" English Mutton Chop

31. Daylight Savings started. Visited Central Park.

A false rumor on our leaving for Europe.

April 18. Report of orders to move on the 23rd.

22. Walked to Hoboken. Baggage late. Our room on the LEVIATHAN dirty.

24. On our way to Europe. Land out of sight by 8 A.M.

(10% increase in salary for foreign service)

May 1. In the danger zone. No undressing.

4 destroyers as escorts this morning.

2. Arrived at Brest 7 A.M.

3. Debarked at 9:30 A.M. Lighter to pier. 4 miles to Pontzenen.

Quartered in tents. Later, slept on beds in hospital ward.

5. Boarded train. Destination ROYAT.

Could talk with and understand french children at the stations. on cars.

The adults talked too fast. Normandy apples in bloom. Chevaux 8, Homes 48 7

6. Passed through TOURS.

7. Arrived Clermont-Feran 9 A.M.

Reached ROYAT-Quarters Hotel de Lion.

10. Our mess opened.

15. Heard the cuckoo for the first time.

16. Complimentary tickets to the Royat Medicinal Baths. No soap allowed.

Water reused. Elderly woman present to dry one off and rub down.

20. Officers quarters moved to Villa Flores.

21. Met Dr. Binet, Gastro-enterologist. His home called Villa Alsacia.

He helps me with French. I help him with English.

23. Obtained french book "Histoire de Napoleon et de la Grand Armee" 1834

25. Purchased french dictionary LAROUSSE, and all french book.



BASE HOSPITAL 320  
Hotel Tien Tsin  
January 1. At Fort Mason, San Francisco

I am Post Exchange Officer  
21. Orchestra practice. Leader Dr. Richards. My flute playing improves.

January 7. Ruffles ordered to New York (XMAS course)  
15. Base 30 dance at the Palace Hotel  
18. First GAS drill.  
19. Rumor that we may be moving soon.  
22. Informed that our orders have arrived.  
27. Rumor that we go by boat.  
28. Orders to have baggage ready by morning.  
1. E. S. Great Northern is our ship. It is at the dock.

2. Went aboard at 10 P.M.  
3. Ship pulled out into the stream at 2:30 A.M.  
4. Sailed from San Francisco at 2 P.M.  
10. Entered Panama Canal. Reached Colon 6:30 P.M.

American Zone ONLY. Panama Zone wide open.  
With ship captain Preston and Dr. Weeks, we saw the Panama Zone.  
12. Fare on ship 2 P.M.

15. Docked at Port of Spain. Saw Norfolk and was interested at Southern  
16. Off Atlantic City. Water, to wash deck, from on deck.  
17. Docked at Hoboken, 6:10 A.M. Ice float in the Hudson River.  
Left ship at 5 P.M. Arrived at Camp Merritt at 6 P.M.

19. Given leave 077 to Wilmington, Del. to visit Bill & Rose Duggan, relatives.  
22. Visited Dr. Gilman and Dr. L. Loebe at Rochester Hospital.  
25. Visited Metropolitan Museum.  
26. Visited Lower New York.

27. Visited Dr. Huggins at Rochester.  
29. Visited the Bronx Zoo and the Hippodrome.  
30. Dined at "Brown's" English Indian Chop.  
31. Daylight Savings started. Visited Central Park.

A false rumor on our leaving for Europe.  
18. Report of orders to move on the 28th.  
22. Walked to Hoboken. Left late. Our room on the LEVIATHAN ship.  
24. On our way to Europe, land out of sight by 5 A.M.  
(10% increase in salary for foreign service)

1. In the danger zone. No unloading.  
A destroyer as escorts this morning.  
2. Arrived at West 7 A.M.  
3. Departed at 9:30 A.M. Lighter to pier. A walk to Fort Monmouth.

Quartered in tents. Later, night on beds in hospital ward.  
5. Boarded train. Destination ROYAL.  
Could talk with and understand French children at the stations. On train.  
The adults talked too fast. Normally speaks in French. Chateau 8, Rouen 107.

6. Passed through 10:30.  
7. Arrived Orléans-France 9 A.M.  
Reached ROYAL-Quartiers Hotel de Lion.  
10. Our mess opened.

15. Heard the cuckoo for the first time.  
16. Complimentary tickets to the Royal Industrial Baths. No soap allowed.  
Water refused. Evidently women present to buy one off and run down.  
20. Officers quarters moved to Villa Merveille.  
21. Met Dr. Bland, Gastro-enterologist. His name spelled Villa Merveille.

He helps me with French. I help him with English.  
22. Obtained French book "Histoire de la Nation de la Grande Armée" 1924  
23. Purchased French tin lantern lamp. It is all French book.



- June 6. Dr. Weeks left to work at the front. (Evacuation Hospital #4)  
 " 7. Mrs. Durban and niece Miss Dodd come to Royat to do Red Cross work.  
 " 9. First patient comes to hospital, a jaundice case.  
 " 11. I am appointed Registrar of Base Hospital #30.  
 " 12. Received a train load of patients-surgical-some British.  
 " 17. Received hospital train of patients. 464. Mostly Mustard Gas.  
 " 19. As Officer of the Day, I inspected 20 floors of patients in 6 buildings.  
 " 29. Col. Dean, commanding officer, ordered elsewhere and has departed.  
 Eugene Kilgore now C.O.
- July 4. Celebration-French citizens of Royat and personnel of Base Hospital #30.  
 Speeches-Music-Inspections-Refreshments.  
 " 10. Clinical meeting for Base Hospital #30. Major Allison described "Debridement".  
 Sterilization and primary closure of wounds at Evacuation Hospitals.  
 " 14. Celebrated French National Holiday with Mayor of Royat and citizens.  
 " 17. Train load of Patients, 392, arrived. Unloading from 5:30 to 8:30 P.M.  
 " 19. Train load of 400 patients-We have 200 vacant beds.  
 " 30. A fire at the R.R. Station (gare) Saw fire company use old equipment-and-pumped water by hand.
- August 5. Train of 220 patients. Placed 60 surgical patients on my medical ward.  
 " 7. Dr. Thompson is our only surgeon. He requested me to do some surgery to help him out.  
 " 16. We are ordered to wear U S (in place of U S R) on uniform collars.  
 Regular army objects to seeing French recognize type of medicine by Reserves.  
 " 19. Am Officer of the Day. Am in charge of the Medical Wards, the Contagious Ward and doing some surgery. Curing Epidemic Meningitis with intra-theal anti-meningitis serum, a French product. duties.  
 " 21. Received train of 400 patients. Ruggles relieved me of the detraining /
- Sept. 6. Jules Frankenheimer is C.O. for a few days. Kilgore on leave.  
 7. Arthur Fisher, as orthopedic surgeon, refused to care for a broken arm, in a cast, because he thought there were lice inside. our  
 " 8. Thompson and Seaver ordered to Evacuation Hospital. Fisher now/only surgeon.  
 " 12. After talk with C.O., Fisher removes cast from broken arm. No Lice.  
 " 17. Train with 350 patients arrived-7 German prisoners.  
 " 22. I request orders to visit Dr. Weeks at Evacuation Hospital #4-Request denied.  
 Train with 235 patients arrived. Many badly wounded. Bed space limited.  
 " 26. I had airplane ride at Michelin Field with Lt. Whiting-De Havelin plane with Liberty Motor.  
 " 29. Changed Ward 18 to Pneumonia patients only.  
 " 30. Left for Paris and Chamonix-vacation.
- Oct. 6. I attempted to climb Mt. Blanc with two guides. Found crevices too wide so returned to Chamonix.  
 " 12. Returned to hospital from vacation. Kilgore has been promoted to Lt Colonel.  
 " 13. Train arrived with many patients.  
 " 15. Many cases of INFLUENZA coming in from neighboring camps.  
 " 19. I am appointed Summary Court Officer.  
 " 23. Train 300 patients came at 4:30 A.M.  
 " 26. 200 plus patients arrived.  
 " 28. Dr. Weeks returned from tour of duty at Evacuation Hospital.  
 " 29. Dr. Thompson returned from Evacuation Hospital.
- Nov. 1. Autopsied a typhoid case. The only typhoid death. Cause of death was inanition. Intestinal ulcers all healed. Several typhoid cases came from small French village where typhoid was endemic. Water was LOADED. Vaccine does protect.  
 " 7. 178 patients arrive, by train. 51 were German prisoners.  
 " 9. Kilgore is to leave. He recommended Fisher and Richards for promotion to majority.  
 " 10. 200 wounded patients arrive.  
 " 11. ARMISTICE-We celebrated in Clermont-Feran. Dr. Weeks is C.O. again.  
 " 13. I am now officially Chief of Medicine. Have always been doing the job without the title.  
 Learn I have been recommended for promotion.



1. Dr. Weeks left for work at the hospital. (Continued from last week's report.)
2. Dr. Thompson and Miss Jones have come to the hospital to do their work.
3. First patient taken to hospital, a Frenchman.
4. I am appointed Registrar of the hospital.
5. Received a French load of patients - mostly British.
6. Received hospital train of patients. 454. Mostly Mustard Gas.
7. As Officer of the Day, I inspected 20 floors of patients in 6 buildings.
8. Col. Dunn, commanding officer, ordered elsewhere and has departed.
9. Eugene Kilgore now O.C.
10. Celebration - French officers of Royal and personnel of Base Hospital "X".
11. Speeches - Music - Inspection - Refreshments.
12. Official meeting for Base Hospital "X". Major Allison described "Performance".
13. Sterilization and primary closure of wounds at Evacuation Hospital.
14. Celebrated French National Holiday with Mayor of Royal and staff.
15. Train load of patients, 192, arrived. Unloading from 7:30 to 8:30 P.M.
16. Train load of 400 patients - have 200 vacant beds.
17. A fire at the R. R. Station (cars) saw this company was old equipment and burned water by hand.
18. Train of 250 patients. Placed 60 surgical patients on my medical ward.
19. Dr. Thompson is our only surgeon. He requested me to do some surgery to help him out.
20. We are ordered to wear M. S. (in place of U. S. R.) on uniform collars.
21. Regular army doctors in visiting French recognize type of medicine by observation.
22. As Officer of the Day, in charge of the Medical Ward, the Gonorrhea Ward and doing some surgery. During epidemic meningitis with influenza and anti-meningitis serum, a French product.
23. Received train of 400 patients. English relieved me of the remaining 600.
24. Jules Franchomme is O.C. for a few days. Kilgore on leave.
25. Arthur Fisher, an orthopedic surgeon, refused to care for a broken arm, in a cast, because he thought there were lice inside.
26. Dr. Thompson and I were ordered to Evacuation Hospital. Fisher now only surgeon.
27. After talk with O.C., Fisher removed cast from broken arm. No lice.
28. Train with 350 patients arrived - 7 German prisoners.
29. I request orders to visit Dr. Weeks at Evacuation Hospital. Request denied.
30. Train with 250 patients arrived. Many badly wounded. Bed space limited.
31. I had airplane ride at Mitchell Field with Lt. Whiting. Dr. Weeks also with liberty motor.
32. Changed Ward 15 to French patients only.
33. Left for Paris and Chamonix - vacation.
34. I attempted to climb Mt. Blanc with two guides. Found crevasses too wide to return to Chamonix.
35. Returned to hospital from vacation. Kilgore has been promoted to Lt. Colonel.
36. Train arrived with many patients.
37. Many cases of INFLUENZA coming in from neighboring camps.
38. I am appointed Summary Court Officer.
39. Train 300 patients came at 8:30 A.M.
40. 300 plus patients arrived.
41. Dr. Weeks returned from tour of duty at Evacuation Hospital.
42. Dr. Thompson returned from Evacuation Hospital.
43. Autopsied a typhoid case. The only typhoid death. Cause of death was influenza.
44. Influenza virus all healed. Several typhoid cases from small French village where typhoid was endemic. Water was LOADED. Typhoid cases healed.
45. 7175 patients arrived by train. 25 were German prisoners.
46. Kilgore is on leave. He recommended Fisher and Richards for promotion to majority.
47. 10,200 wounded patients arrive.
48. ARMISTICE - We celebrated in Giverny - France. Dr. Weeks is O.C. again.
49. I am now officially Chief of Medical. I have always been doing the job without the title.
50. I have been recommended for promotion.



## BASE HOSPITAL #30

November cont-

- " 14. 300 patients arrive. much vermin
- 19. SNOW.
- " 24. Dr. Thompson receives his majority.  
Col. Carter assumes command of Base Hospital #30.
- " 28. Thanksgiving Dinner-staff- 1 to 4 P.M.
- December 25. Snow - Christmas Dinner 3 P.M.

1919

- January 6/11-Took train to Nime, Tarascon, Marseille, Nice, Cannes, Monte Carlo for short vacation.
- " 13. Orders for Ruggles and me to proceed to U.S.A.  
Train to Paris, Brest.  
At Brest billeted at Ft. Bougum. Given wet bedding. No comforts for lieutenants and captains. My promotion would have prevented this.
- " 17. At Brest, for dinner, I had my first taste of SNAILS at "Voyageurs".
- " 22. After 4 trips to the dock, I was finally placed on the passenger list on the "Plattsburg". On the way home.
- " 30. Arrived at New York.
- February 3. Received my discharge at Camp Dix (instead of place of entering service, San Francisco). I travel across to the Pacific Coast as a private citizen.

*This supplements the material in  
Unit 30 by Michael Schindler  
being published.*

*W E Carter*

*Elbridge Best was among  
this Group, World War I  
and is now one of the  
few survivors.*

*June 4, 1964.*







WM. J. KERR, M. D.

BOX 338

BLUE LAKE, CALIFORNIA

Feb. 28.64.

Dear Bill:

Under separate cover I am sending you a "news item" from our local paper. Since it is so complimentary I thought you might wish to put it in the archives after you have checked it for facts. I am unable to understand the reason for such a spread since I am in good health although approaching my 75<sup>th</sup> birthday on Apr. 30<sup>th</sup>.

I hope all goes well with you. I think of you often and never cease to be grateful for all you did for the school & all of us.

Dothy joins in God wishes <sup>Sincerely</sup> Bill



William John Kerr



'Kerry



LIFE

By A

where fashion is always

Kent

light and bright  
Easter Sunday in  
and jackets vary  
colors are bright  
interesting fabrics

## ward Eagles' Auxiliary Zone Meeting Scheduled in Ukiah 10 to 6 Today

of cere-  
Marlys  
umerville,  
they gave  
ent Camp  
on which  
Francisco.  
ucted the  
g and in-  
for 1964.  
incoming  
e gavel.  
Montgom-  
People in

Ladies Auxiliary of Eagles No. 130 met Thursday, Feb. 13 in the hall at 1317 California Street with Mrs. Louis Mohorovich presiding.

One visitor, Mrs. Betty Jones of Arcata Auxiliary No. 1846, was welcomed by the members. Mrs. Jones is the zone director for the district and reported that the next zone meeting will be held in Ukiah today from 10 a.m. to 4 p.m.

Eureka Auxiliary has consented to hold the next zone meeting in the hall on Sunday, May 3. Plans for this meeting will be made at the Feb. 27 meeting.

There will be a pot luck dinner in the hall on March 5 with Mrs. Claude Ellison and her committee in charge. A public card party is also planned for March 16 in the hall.

Memorial Services for the deceased members will be on

March 12 with Mrs. Esther Underwood as captain in charge.

Mrs. Marie Rasmussen, a former member of the Arcata Auxiliary, was granted a transfer to the Eureka Auxiliary.

A donation has been sent to the Auxiliary's name to the M. Baer Heart Fund, one of the many projects of the Auxiliary.

Pal names were drawn for the next six months.

The attendance prize was won by Mrs. Joy Paul and the mystery package by Mrs. M. M. Perevia.

Mrs. Carol Fielder was installed as trustee by Past Master President Nell F. Young.

The hall was decorated in the Valentine theme by Mrs. Esther Underwood.

Refreshments were served after the meeting. The next regular meeting will be on Thursday, Feb. 27 at 8 p. m.

each

les!

d be ele-  
ever it is,  
nion right

### REVERBERATION

The new EVERETT ORGAN is the only electronic organ in its price range to give you this 3 dimensional sound system

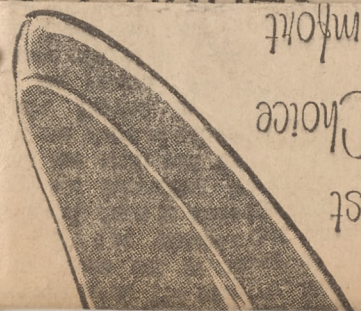


There's more of  
what's good for  
you in All Jersey

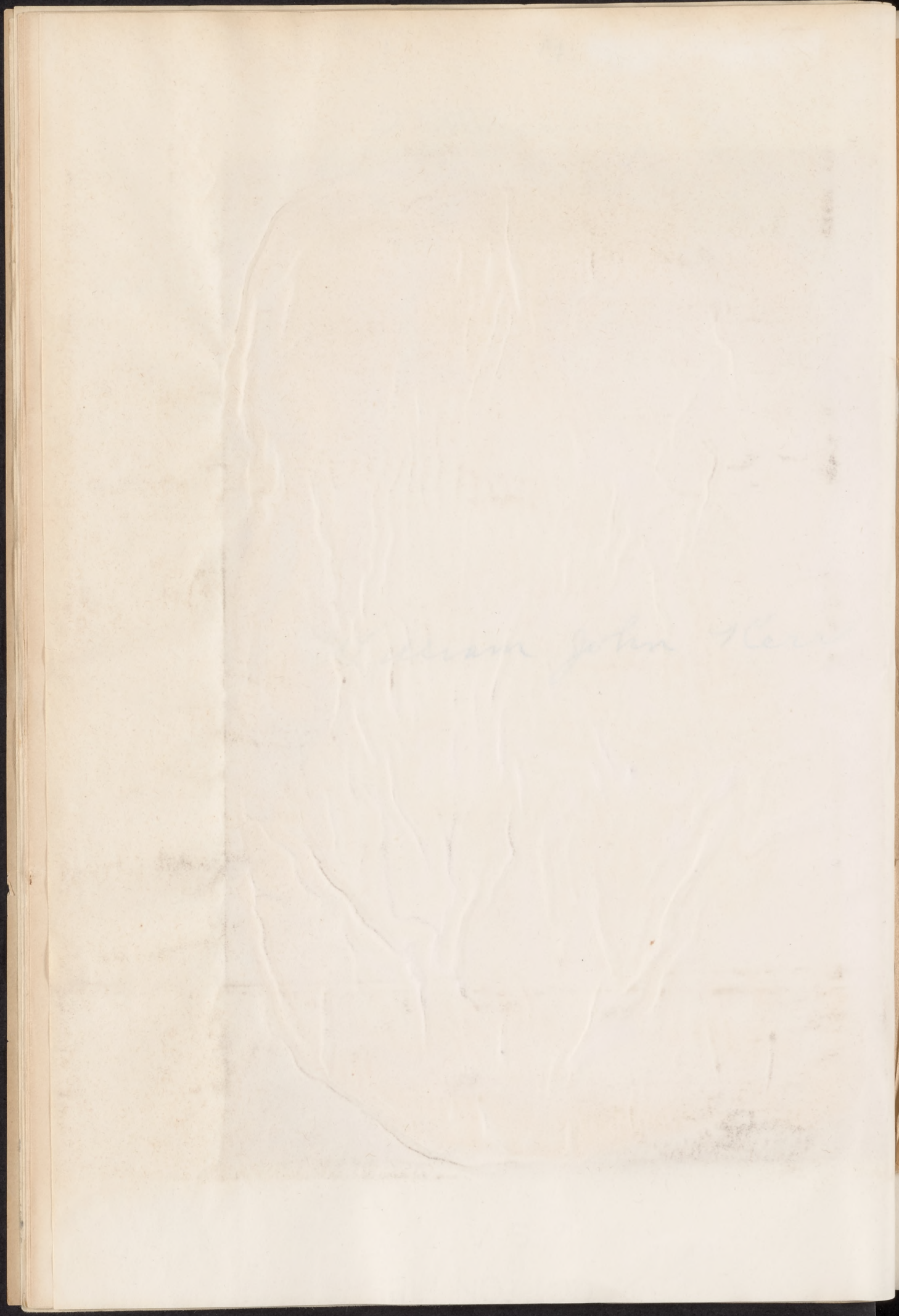


PRINTED PATTERN

Just  
Choice  
for Comfort









# Doctor Wrote His Own Prescription: Humboldt Mountains An Earned Haven

By ANDREW GENZOLI

If settler Bartholomew (Barney) Crogan were alive today, he would be pleased with the people who occupy his old, hard-earned homestead. They would be the kind of people he would have chosen for friends, those unafraid to venture, to pioneer in fields where other men may have hesitated.

Pioneering for Barney Crogan and Dr. William John Kerr would take divergent paths. While apart in many ways, there would be, in common, values of courage.

Barney Crogan must have had the heart of a poet and the eye of an artist, talents he utilized when he chose the site for his cabin in those turbulent 1850s. Perils of wilderness in the Maple Creek country, some ten miles—today—east of Korb, called for a fearless man, willing to face the challenges of Nature. The name of Crogan lingers in Humboldt history.

Now, on the same location, there is a gray home with a red roof, surrounded by a colony of ranch buildings. This is "Kerrydale," the Kerr Brothers ranch. Here, Dr. William J. Kerr, and his wife, Dorothy Fish Kerr, and brother, Guy Kerr, share memories, and attend to the current duties of the day. For Dr. and Mrs. Kerr, these are the times of an active retirement. Guy supervises the operation of the seven thousand acres which ramble through the mountains. Hereford cattle graze in the pastures.

"Kerrydale" is in the lap of a comfortable slope, some 1200 feet above sea level. The rambling home faces out in all directions. From whatever point you stand, there is something new and interesting to see. From the south and the east, there are views of valleys and forests. Beyond is the green of the ranges, topped with the snow caps of the taller mountains. Even when the garden is in its wintry throes, there is evidence of seasonal beauty which at other times yields colorful abundance.

Once inside the Kerr home, one finds a blend of numerous and absorbing interests; a treasure-house filled with memories, souvenirs, beautiful things, unusual things, and a full measure of warmth and good living.

Dr. William John Kerr, the modern pioneer, is a pioneer in the very manner in which the word is to be used. His "trail-blazing" has been for the benefit of humanity, bringing relief and hope to its suffering, and a better life. His work has had an international scope. Dr. Kerr guided many worthy young men into careers of medicine. Many have achieved fame in their own lives.

Surveying the career of Dr. Kerr, Dr. Chauncey D. Leake, executive vice president of the University of Texas Medical

Branch at Galveston, Texas, penned these words, in editorial tribute. This appeared in the "American Practitioner" in 1949. (The edition was dedicated to Dr. Kerr.):

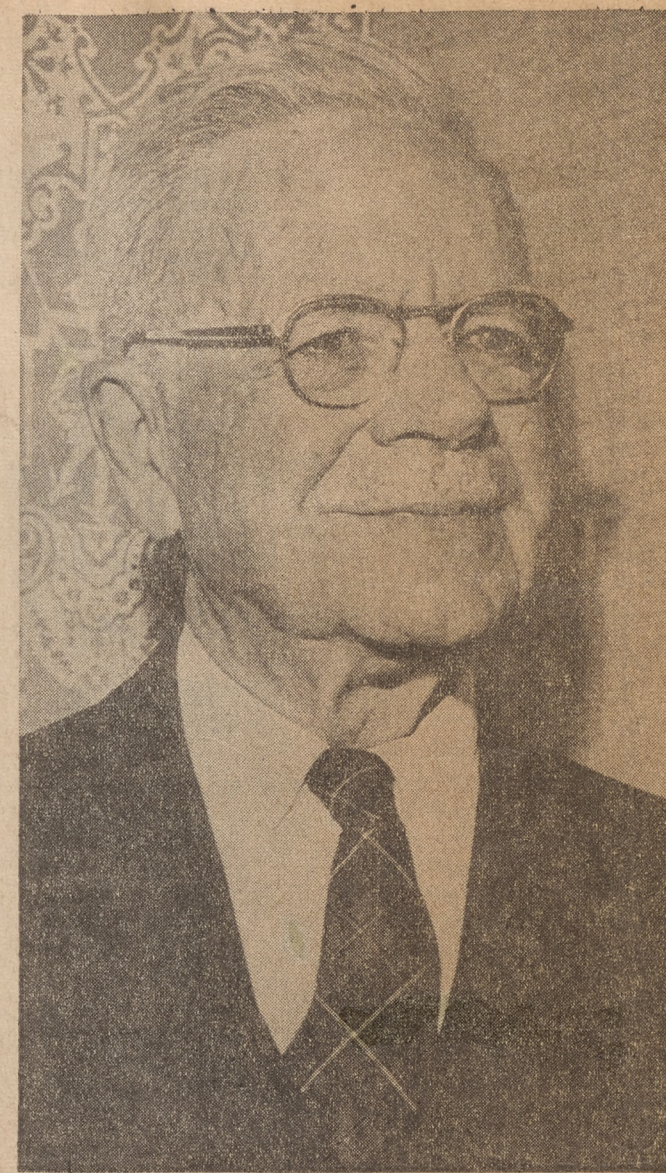
"A short biographical account of William J. Kerr, no matter how skillfully drawn, cannot do justice to the richness of his personality. During his professional career, whether as teacher, clinical investigator, practicing physician, or guide, counselor and friend, he has given strong inspiration to the many thousands who have come in contact with him to meet the best humanitarian standards. His professional and personal example has been in the highest tradition of our culture."

"William John Kerr was born of Burdette and Sarah Ellen (Daywalt) Kerr in Blencoe, Iowa, April 30, 1889. Coming to California early in his life, he quickly acquired the calm self-reliance of an effective pioneer. After receiving his degree of Bachelor of Arts from the University of California in 1912, he studied Medicine at Harvard, where he obtained his doctorate in 1915. The inspiration of his great teachers at Harvard has remained a deciding factor in his subsequent career. He interned at the Massachusetts General Hospital, Boston, and then was appointed Traveling Fellow in Medical Research under the auspices of Harvard University, beginning his studies with Dr. George H. Whipple, director of the Hooper Foundation for Medical Research at the University of California Medical School. There he came under the stimulating influence of Dr. Herbert C. Moffitt, Professor of Medicine, and there he has since remained to carry forward so successfully his work."

Taking a quick backward glance at his California school days, we find William attending Wilson Grammar School at Pasadena, graduating in 1904. At Los Angeles High School, he completed a four-year course in two-and-a-half years, graduating in the Winter of 1908. He received his Bachelor of Science degree at the University of California in 1912. In 1915 he received his Medical Degree from Harvard Medical School. In 1956, Dr. Kerr's long line of honors was capped with the awarding of an honorary degree, Doctor of Laws (LL.D.), at the University of California. There were nine from the class of 1912—the largest number from any class to be so honored—including Chief Justice Earl Warren, Newton Drury of Save-the-Redwoods League fame, James Black, president of Pacific Gas & Electric Company, and others.

## Planting of Roots

While William was studying at California and Harvard, the Kerrs "Humboldt roots" were being firmly planted. In 1912, the Kerr family, William's father and mother, and brother,



William John Kerr, M.D.

er, Guy, came to Humboldt from Dorris, in Siskiyou County. They joined William's oldest brother, Charles Edward, who was Northwestern Pacific Railroad stationmaster at Elinor. During the summer of 1912, father Burdette Kerr decided to go to Southern California. A cousin wanted him to come and look at property in San Diego. He had homesteading in view. Guy says: "We drove a team all the way from Elinor to Los Angeles. I had a chance to see California at 25 miles an hour."

In the spring of 1914, the family moved to Redwood Creek, to what is now referred to as the "Old Place." From 1913, through many summers to follow, the "Old Place," was the rendezvous for the Kerr clan. Together, they built a two-story log house.

Going back to Dr. Leake: "In 1917, Dr. Kerr married Dorothy Campbell Fish. Mrs. Kerr has been a staunch supporter of her husband's efforts. As mother, poet and ranch manager, she has furnished an ideal environment for her husband and their family. William John Jr., Marjorie Simpson, Dorothy Campbell and Farnum Woodward

man and his endeavors, there stands the real inspiration." Mrs. Kerr, with a smile said: "There was an important decision for us to make. It was whether Bill would go into practice for himself, or become a teacher." He had his choice of driving Cadillacs, and having a large income, or driving a smaller car, and existing on a teacher's salary. It was settled. The teaching job, paying \$2000 a year, was accepted.

"We don't regret the decision," Mrs. Kerr said. "Our home was always open to the students and the faculty. Around our barbecue many lasting friendships have been formed. It was all very worthwhile, rewarding."

Again, Dr. Leake's tribute: "At the University of California Medical School, Dr. Kerr rose rapidly in the Division of Medicine. In 1922 he was appointed Associate Professor and in 1927 he became Professor of Medicine and Chairman of the Division of Medicine. Under his direction, his associates have contributed broadly and significantly to the development of internal medicine in the country."

(William John Jr. received his medical degree from Harvard Medical School in 1945. He died in 1958.)

## A Decision To Make

At "Kerrydale," the other day, Dr. Kerr nodded toward his wife, saying: "Behind every

plication of his scientific interest to practical clinical affairs

Dr. Kerr worked with Sir Thomas Lewis on "Raynaud's disease," the reaction of blood vessels in the skin to cooling.

"I was interested in the heart from the beginning," Dr. Kerr says. "As a medical student, with the now famous Dr. Paul Dudley White, I collaborated on a paper in 1916. It was on the anatomy of a whale's heart." The whale's heart, Dr. Kerr explains, came from the old whaling station at Trinidad.

In 1939, Dr. Kerr participated in an international radio hookup between London, Boston and San Francisco. Taking part with Dr. Kerr were Sir Thomas Lewis and Dr. White. This was an attempt to interest the public in cardiovascular diseases. Mrs. Kerr says: "This was the first medical hookup, and probably one of the first international radio hookups attempted, then."

"Dr. Kerr rose to the rank of Major, and was Chief of the Medical Service at the base hospital at Camp Lewis, Washington," Dr. Leake wrote in 1949.

"One can readily appreciate the scope of Dr. Kerr's professional interests by studying the list of his published contributions. Maintaining a pleasant curiosity about the functioning of the human body, particularly with regard to cardiovascular and respiratory disorders, he has made significant contributions in new instruments of precision, in the use of new drugs, in hyperventilation syndrome, in the postural syndrome, and in regard to the common cold

## The 'Gold-Headed Cane'

"Outstanding among Dr. Kerr's achievements has been his success in developing exceptional groups of young internists year after year. Indicative of his influence on the formative stages of physicians in his annual award of the Gold-Headed Cane to the senior student, who, in the opinion of his classmates and the faculty members of the Division of Medicine, had demonstrated the most outstanding qualities of a true physician during the clinical years..."

The Gold-Headed Cane provides an interesting chapter in Dr. Kerr's life, as it brings together an established tradition in London and a small bit of Humboldt County.

Turning the pages of the sixth edition of "The Gold-Headed Cane," by William Macmillan, M.D. (1877), and reprinted by Dr. Kerr, one finds this in his preface: "In 1939 the first award was made at a fitting ceremony at the University of California School of Medicine. The award is based upon the student's interest in the welfare of his patients during his entire clinical experience."

The manner in which the candidate for the "Gold-Headed Cane" is chosen, is a whole story in itself. But, this part is Humboldt's: "The shaft of our cane is fashioned from wood of the ancient mountain yews which grow on the well-watered bank of a rushing mountain stream in Northern California, where in early days the Indians selected their wood for the sturdy bows needed when in quest of deer and bear which abounded in that region. Over many years choice logs were selected so that the wood might be well seasoned before turning. On one occasion a yew fence-post of excellent quality, which had served its purpose for many years on our ranch, was snatched from its moorings to serve a more noble purpose. The over-all length of our cane is 35 inches, but if our youth continues to grow taller, it may be necessary to increase this traditional length..."

Dr. Herbert Charles Moffitt was the first to receive the Gold-Headed Cane. It honored his inspiring work and leadership in medicine. Today's Moffitt Hospital continues the tribute to the great teacher and medical man.

## Time for Retirement

Dr. Kerr retired in July of 1952, four years before statutory age, for personal reasons, four of which he listed:

"a) belief that with the period of expansion under way, younger and more energetic men should have the opportunity to meet new challenges, and

"b) if one stays on too long, an increasing number of people will wonder why, and

"c) if a physician cannot appreciate it when he reaches his plateau, who can, and

"d) if he stays on long enough, he may not appreciate the fact he is becoming less useful."

Retirement—a lively brand of retirement—came after a lifetime of rich contributions to medical education and practice, which alone, form a chapter of interesting reading. Since this is not a book-length feature, we must concentrate our facts.

Turning to the category captioned: "Chief Contributions" to clinical medicine, we list the following:

"Pathological physiology in angina pectoris and rational therapy based thereon.

"Rational approach to the disorders of function in the anxiety states, and recognition of the hyperventilation syndrome.

"Various clinical contributions in cardiovascular disease, goiter, and diseases of the liver.

"Resurrection of the Preceptor System (1924), and other improvements in medical education."

## A Man's Contributions

Among Dr. Kerr's special contributions to medical education and practice, we are able to list but a few of many:

He was the organizer of interest in cardiovascular problems in California. He brought together a few interested physicians to form the San Francisco Heart Committee. He was its first chairman. Dr. Kerr initiated the first Cardiovascular Postgraduate Course. Since that time the courses have been held annually by the San Francisco Heart Committee. He was the first chairman of California State Heart Committee in 1927. As a member of the board of directors of the American Heart Association, he emphasized the need for making the association truly national in scope. This proposal led to regional selection of directors. Later, Dr. Kerr was interested in national support of the clinical and research activities of the association. He was the first president from any western state. He served as editor of "Modern Concepts of Cardiovascular Disease," a monthly bulletin of the American Heart Association, for four years beginning, January 1936.

John J. Sampson, M.D., San Francisco, president of the American Heart Association, says: "Probably Dr. Kerr's most important contribution to the Heart Association was his development of regional representation on the board of directors. This principle has been incorporated in all phases of AHA's committee and organization structure."

"In 1946, Dr. Kerr was jointly president of the American Heart Association and the American College of Physicians. During an evaluation session in 1946, he was an important participant in the meeting which established the two principles which have been part of the Heart Association policy: 1) Taking the American public into partnership. Prior to this time the Heart Association was a small professional organization. 2) Emphasis on research. Dr. Kerr was an influential member of the Tuberculosis Association, which was the sponsoring group of Heart Association activities in California.

"The Heart Association, itself," Dr. Sampson says, "began with a committee from the tuberculosis group, and the Medical Association made the heart group their cardiac committee. He was first chairman of the San Francisco Heart Committee. He also was the first president of the American Rheumatism Association.

"In 1954 he established the Dorothy and William Kerr award for the most important contribution in the field of clinical cardiology. This award is an annual feature of the San Francisco Heart Association."

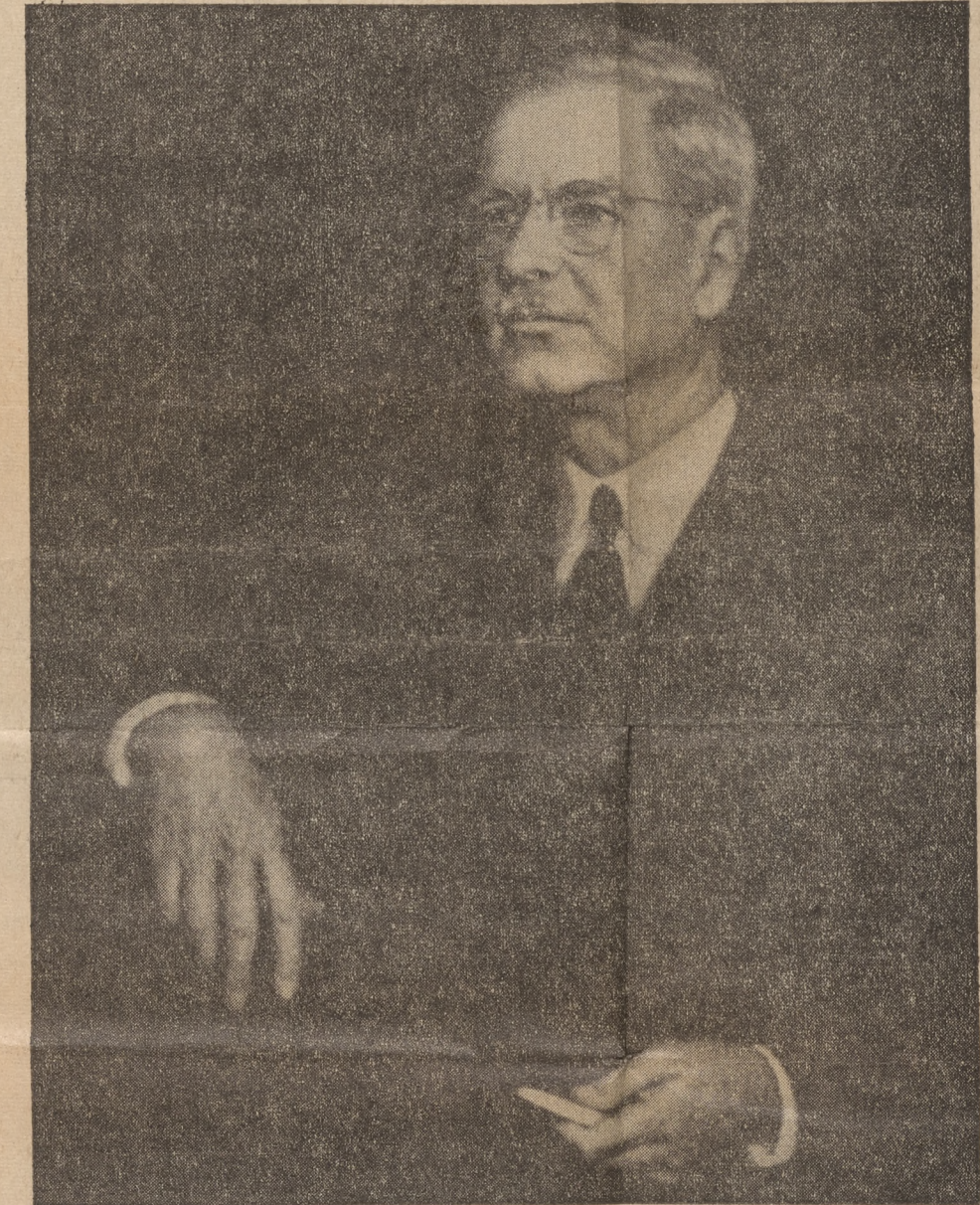
In the field of medical equipment, Dr. Sampson noted, Dr. Kerr developed a type of stethoscope with two sets of earphones, useful in detecting the direction of heart murmurs. "He also developed the Kerr-Salgum belt which is used in cardiac treatment; use is limited to California."

While chairman of the Section on Practice of Medicine of the American Medical Association and president of the American College of Physicians, Dr. Kerr took a leading part in the formation of the American Board of Internal Medicine. As a member of the Board of Regents of the American College of Physicians, he initiated post-graduate courses for the college. He served as chairman of the first committee in charge of courses in several medical schools.



Gardening is one of the favorite pastimes of Dr. and Mrs. Kerr. Here they stand in their garden on a sunny Humboldt winter day. The garden in

its peak is resplendent with towering holly hocks and a cascade of colorful flowers. Mrs. Kerr enjoys doing paintings of the flowers.



A 1949 edition of the "American Practitioner," dedicated to Dr. Kerr for his work in medical education and the cardiovascular field, features this painting. The work is by Alfred Jonniaux of San Francisco and New

York, noted portrait artist. The setting for the painting is a classroom, typical of Dr. Kerr's life at the University of California School of Medicine. At this time he was urging a College of Letters and Science at U.C.

mation of the American Board of Internal Medicine. As a member of the Board of Regents of the American College of Physicians, he initiated post-graduate courses for the college. He served as chairman of the first committee in charge of courses in several medical schools.

## An Award for Nurses

Dr. Kerr proposed and financed the first Florence Nightingale Award. University of California School of Nursing, to stimulate interest in bedside nursing. This year, for the first time at Humboldt State College, a "Florence Nightingale Award" will be awarded to a student nurse. The award will be made by the Humboldt County Cow Belles, with the assistance and cooperation of Mrs. Kerr.

In 1925, Dr. Kerr instituted the Journal Club in the Department of Medicine to promote interest in medical literature.

In 1950 he was chiefly instrumental in securing funds from the California State Legislature to support research in Metabolic and Nutritional disorders. It was the first time the University and the State undertook to support patients under investigation on an equal footing with animals. In 1958 Dr. Kerr promoted the establishing of the Cardiovascular Institute at the U. of C. School of Medicine.

## The Atomic Age

Dr. Kerr was always willing to explore the new. He was among the first to appreciate the significance to biology and medicine of the advances in nuclear physics. As president of

the American College of Physicians, in 1938, he invited Professor Ernest O. Lawrence to deliver the Convocation Address on radio-active isotopes. With a loudspeaker and Geiger counter, the speaker demonstrated how plants take up radioactive tracer compounds. This was the first demonstration to the medical profession. Later, Dr. Kerr cooperated with Dr. John H. Lawrence by providing patients with leukemia and polycythemia for treatment with radioactive phosphorus. Dr. Mayo Soley and Dr. Jose G. Hamilton were encouraged to try radioactive iodine in the treatment of toxic goiter. At the behest of Dr. Kerr, Dr. Hamilton proceeded to devote his talents to medical physics. Several courses of lectures on nuclear physics were given to the house staff. Dr. Kerr promoted the first comprehensive course on nuclear physics in the world, with experts in all phases of the subject under the direction of Dr. Hamilton. In 1949 Dr. Kerr sponsored a course, "Man and The Atomic Age," under the direction of Dr. Richard C. Bentinck and Dr. Malcolm S. Watts. This course was designed to assess the impact of atomic science on the behavior of man and the means of improving patterns of social life to meet the new order.

These are but a few of Dr. Kerr's accomplishments. Many more columns would be needed to cover the positions he has held, his military service, his professional associations, his editorial accomplishments, his fraternities and societies.

## Amid the impressive names

of the Harvard Medical Alumni Association, the Beta Kappa Alpha, the William Watt Kerr Club, the Masonic order, one finds "Humboldt County Cattle-men's Association, Member, Board of Directors, 1932—"

Missing from the list of positions, sabbaticals, etc., is the year 1952, when a "sabbatical" was taken for a different purpose. That year, Dr. and Mrs. Kerr came to "Kerrydale," to determine if Humboldt winters would be agreeable. It was a successful "sabbatical," for shortly after, retirement became a fact.

The home at "Kerrydale" has a full chapter of history all its own. While Barney Crogan was away, when Indians made the area untenable, they burned his original home. In the 1860s, he returned to build a small, permanent home. The last owner, before the Kerr's, was Robert Barr.

The original physical features of the home, such as the living room, a small bedroom, the kitchen, remain about the same as they always were. In 1952, Dr. and Mrs. Kerr added a two-story addition. There are three beautiful bedrooms with magnificent views. A hallway utilizes the former south wall of the old home. An unusual and spectacular feature of one of the bedrooms is a left-hand spiral staircase. This is copied from a castle of Dr. Kerr's forebears in Scotland. The steps are solid blocks made from old overhead trolley beams from Hammond Lumber Company. These are covered with three-eighths-inch surfaces on all sides, with 15

(Continued on Page 23)



On a recent Sunday, Dr. Kerr participated in a panel on the heart. The panel was sponsored by the Humboldt County Heart Association, bringing together eminent medical men in the field of heart. Dr. Kerr told of the organization of the California Heart Association, in which he had an important part, and his experiences as president of the Amer-

ican Heart Association. With Dr. Kerr are, left to right, Lloyd Graybiel, Chico, panel moderator; Dr. Harney M. Cordua, San Diego; and Dr. Halvor Braafladt, president of the Humboldt County Heart Association. Not shown is Dr. Chester Hyman, Ph.D., University of Southern California School of Medicine.



THE HAWAIIAN

WOMEN

OF HONOLULU

PAGE

NUMBER



HI 3-7985

SHOLE

Life stride.





Radioisotopes Studies

Veteran's Hospital, Tucson, Arizona

by

Wm A. Reilly



Radioisotope Studies

Veteran's Hospital, Tucson, Arizona

by

Wm A. Reilly

ideal mightily during its difficult formative



May 27  
I just thought of this  
Dear Short & Beckwith  
Admission at annual  
set before Bill

# Pioneer In Radioisotopes For Medicine Continues Research Here

by Julian DeVries  
Medical Editor, Arizona Republic

**D**ESTRUCTION IS NOT a synonym for the nuclear age.

The same radiation forces that can destroy life, also can help save it.

That is what radioisotopes do.

**RADIOISOTOPES** ARE chemical elements made radioactive by nature, or by man in his laboratories.

Injected into an ailing human body, they quickly pinpoint the trouble. In that respect, they are like X-rays, where X-rays won't work.

Take the thyroid gland, for example. It's difficult to X-ray. And X-rays can't show how the gland is working.

**IODINE** IS IMPORTANT to thyroid function. Too much iodine taken up by the thyroid makes a person hyperactive. Too little makes him sluggish. But there are other conditions which can produce the same results.

How, then, can a doctor tell whether it's his patient's thyroid that's responsible for his condition, or whether it's something else?

Radioactive iodine, harmless and almost tasteless in the amounts needed, is given to the patient to drink. Doctors call it an "atomic cocktail."

**NOW THE PATIENT LIES** under an apparatus called a "scintillation scanner," similar in principle to a Geiger counter. As the radioactive iodine is picked up from the patient's bloodstream by the thyroid, it emits radiation which is picked up by the scanner, which makes visible tracings of the radiation on a sheet of paper. Thus the gland is outlined.

Areas of lighter or darker shading on the tracing show the doctor where perhaps no iodine was picked up, or maybe too much iodine was picked up. If there are no abnormalities on the



ideal mightily during its difficult formative years.  
WE loathe



Radioisotope Studies

Veteran's Hospital, Tucson, Arizona

by

Wm. A. Kelly



# Pioneer In Radioisotopes For Medicine Continues Research Here

by Julian DeVries  
Medical Editor, Arizona Republic



may 27  
I just thought of this  
Dear Sheet  
Alumni at Annual  
Let's hope the Bill

years.  
and many of our  
is a different  
former  
WE have

Dr. A. Reilly hopes to  
of radioisotopes and  
new medical and hum-  
ological uses while serving  
Phoenix Veterans' Administra-  
hospital. He foresees even  
use for radioisotopes for  
obscure conditions.

**D**ESTRUTION IS NOT a synonym for the nuclear age.

The same radiation forces that can destroy life, also can help save it.

That is what radioisotopes do.

**RADIOISOTOPES ARE** chemical elements made radioactive by nature, or by man in his laboratories.

Injected into an ailing human body, they quickly pinpoint the trouble. In that respect, they are like X-rays, where X-rays won't work.

Take the thyroid gland, for example. It's difficult to X-ray. And X-rays can't show how the gland is working.

**IODINE IS IMPORTANT** to thyroid function. Too much iodine taken up by the thyroid makes a person hyperactive. Too little makes him sluggish. But there are other conditions which can produce the same results.

How, then, can a doctor tell whether it's his patient's thyroid that's responsible for his condition, or whether it's something else?

Radioactive iodine, harmless and almost tasteless in the amounts needed, is given to the patient to drink. Doctors call it an "atomic cocktail."

**NOW THE PATIENT LIES** under an apparatus called a "scintillation scanner," similar in principle to a Geiger counter. As the radioactive iodine is picked up from the patient's bloodstream by the thyroid, it emits radiation which is picked up by the scanner, which makes visible tracings of the radiation on a sheet of paper. Thus the gland is outlined.

Areas of lighter or darker shading on the tracing show the doctor where perhaps no iodine was picked up, or maybe too much iodine was picked up. If there are no abnormalities on the

...with 10 medical teachers. With their families, they spent two years on the project. During that time, Dr. Reilly also served as visiting professor of pediatrics at Airlangga University in Surabaya.

What the much-traveled professor hopes to do in Phoenix is apply the use of radioisotopes to medicine and human biology in the diagnosis and treatment of human sickness.

With the aid of laboratory animals, Dr. Reilly hopes also to investigate the application of radioisotopes to the problems of thyroid, kidney, circulatory, and other body systems. Implementation of his plans, he said, depends on the availability of VA funds.

**NOW A COLONEL IN THE** honorary reserve, Dr. Reilly served in the Italian, Sicilian, African and French campaigns during World War II, in which he was wounded. In Sicily, he was personal physician to the late Gen. George Patton.

Although radioisotopes today have wide medical use, Dr. Reilly foresees an even greater use for them in the future as new techniques are developed for the diagnosis of obscure conditions.

As an example of such use, the VA radio-biologist-physician pointed to mental retardation in which radioisotopes can be used to measure the blood circulation in the brain, and to pinpoint damaged brain areas. Such, he said, can enable doctors to make more accurate diagnoses.

Dr. Ernest Lawrence in the development of radioisotopes—chemical elements made radioactive by nature, or by man-made changes wrought in them by the chain-reacting pile of a nuclear reactor, and other devices.

When Dr. E. O. Lawrence died in 1958, Dr. Reilly continued his researches with the scientist's brother, Dr. John H. Lawrence, present director of the Donner Laboratory in Berkeley.

Dr. Reilly is now in Phoenix to establish a radioisotope service at the Veterans' Administration Hospital here, to which he has been transferred from the San Francisco VA hospital, where he was chief of the radioisotope service for 13 years.

**DESPITE HIS EMINENCE** in the field of radioisotopes—he was the first in the world to use them medically—Dr. Reilly considers himself to be a clinician who is vitally interested in the care of patients. Medical research, he said, is an integral part of clinical care. In support of that contention, he points to the fact that it was thyroid gland problems in children that led him to pioneer in the field of radioisotopes.

The VA scientist served as professor of pediatrics at the University of California School of Medicine; Vanderbilt University School of Medicine, Nashville, Tenn.; and the University of Arkansas Hospital and Clinic, Little Rock.

He has just returned from a tour of duty as

pointed both as to origin and possible cure, through the use of radioisotopes.

Because a teacher of pediatrics and his group at the University of California Medical School in San Francisco wanted a better test for thyroid function in children, an entirely new branch of medicine and medical physics was helped into being.

Dr. William A. Reilly was engaged in teaching and research as well as the private practice of pediatrics in his native San Francisco.

**AN IMPORTANT STEP** in diagnosis is an evaluation of the function of the thyroid gland. This butterfly-shaped organ at the base of the neck lies across the windpipe. One of its jobs is to absorb iodine extracted by the body from food.

A reliable, accurate method of measuring thyroid uptake of iodine was needed.

So, one day in 1937, Dr. Reilly and his group went over to Berkeley and asked Dr. Ernest O. Lawrence, and his physician brother, Dr. John H. Lawrence, if iodine could be made radioactive.

**IF IT COULD, THEN A WAY** would be available for accurately measuring thyroid uptake of iodine simply by measuring the radioactivity emanating from the thyroid.

Dr. Ernest Lawrence said he thought it could be done, and did it. Thus was an entirely new medical specialty—the use of radioisotopes in



s, using other elements, chromium, for example, and brain.

OT BE too far diseases such as arthritis can be pinned and possible cure, types.

atics and his group aia Medical School ter test for thyroid ely new branch of s was helped into

ngaged in teaching private practice of ancisco.

a diagnosis is an the thyroid gland. t the base of the One of its jobs is e body from food. of measuring thy-

ly and his group ed Dr. Ernest O. rother, Dr. John nadé radioactive.

7 would be avail- thyroid uptake of he radioactivity

thought it could an entirely new radioisotopes in

medicine—opened up by the San Francisco pediatrician and his group.

Dr. Lawrence, by the way, was the man who won the Nobel Prize in physics in 1939 for his development of the cyclotron, which gave tremendous impetus to the coming of the atomic age.

DR. REILLY'S GROUP worked closely with Dr. Ernest Lawrence in the development of radioisotopes—chemical elements made radioactive by nature, or by man-made changes wrought in them by the chain-reacting pile of a nuclear reactor, and other devices.

When Dr. E. O. Lawrence died in 1958, Dr. Reilly continued his researches with the scientist's brother, Dr. John H. Lawrence, present director of the Donner Laboratory in Berkeley.

Dr. Reilly is now in Phoenix to establish a radioisotope service at the Veterans' Administration Hospital here, to which he has been transferred from the San Francisco VA hospital, where he was chief of the radioisotope service for 13 years.

DESPITE HIS EMINENCE in the field of radioisotopes—he was the first in the world to use them medically—Dr. Reilly considers himself to be a clinician who is vitally interested in the care of patients. Medical research, he said, is an integral part of clinical care. In support of that contention, he points to the fact that it was thyroid gland problems in children that led him to pioneer in the field of radioisotopes.

The VA scientist served as professor of pediatrics at the University of California School of Medicine; Vanderbilt University School of Medicine, Nashville, Tenn.; and the University of Arkansas Hospital and Clinic, Little Rock.

He has just returned from a tour of duty as

Chief of Party for the Medical Education Project in Indonesia of the University of California—a job equivalent to that of dean of a medical school.

THE GOVERNMENT OF Indonesia had asked the United States to furnish aid in medical education. Dr. Reilly was picked for the job, together with 10 medical teachers. With their families, they spent two years on the project. During that time, Dr. Reilly also served as visiting professor of pediatrics at Airlangga University in Surabaja.

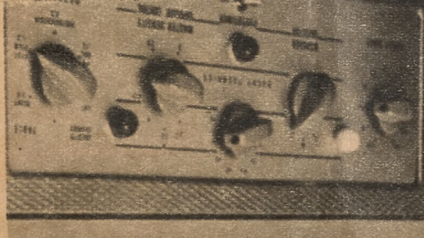
What the much-traveled professor hopes to do in Phoenix is apply the use of radioisotopes to medicine and human biology in the diagnosis and treatment of human sickness.

With the aid of laboratory animals, Dr. Reilly hopes also to investigate the application of radioisotopes to the problems of thyroid, kidney, circulatory, and other body systems. Implementation of his plans, he said, depends on the availability of VA funds.

NOW A COLONEL IN THE honorary reserve, Dr. Reilly served in the Italian, Sicilian, African and French campaigns during World War II, in which he was wounded. In Sicily, he was personal physician to the late Gen. George Patton.

Although radioisotopes today have wide medical use, Dr. Reilly foresees an even greater use for them in the future as new techniques are developed for the diagnosis of obscure conditions.

As an example of such use, the VA radio-biologist-physician pointed to mental retardation in which radioisotopes can be used to measure the blood circulation in the brain, and to pinpoint damaged brain areas. Such measurements, he said, can enable doctors to make more accurate diagnoses.



new medical and hum- of radioisotopes and A. Reilly hopes to

"DIPPE

ite construction with water- natic skimmer, filter, pump, n- arantee for your protection.

"SKIPP

es excavation, 3' KoolDeck, e- rior, electric connections, cert- OMPLETION BOND and 104-

Bank Fin

Carry

CALS

You're better off with Padd

ced Po



dd  
Po

PPE

with water  
lter, pump, m  
protection.

IPP

3' KoolDeck, s  
connections, aer  
OND and 10-

Fin

ry

new medi  
K m A. Rei



Chief of Party for the Medical Education Proj-  
ect in Indonesia of the University of California—

medicine—opened up by the San Francisco pedi-  
atrician and his group.

in the



Resume

Department of Anatomy

by

Jon Monie

see also:

Tape recording  
History Room  
Library

by

Herbert Evans



Depa  
on th  
medical  
t has  
as tra  
ces B  
with  
rancis  
od of  
s need  
Medici

Resumes

Department of Anatomy

by

Jon Morris

see also:

Library  
History Room  
Tape recording

by

Herbert Evans

SCH

0.4

r to  
l Sch  
San  
that  
n the  
n is  
nt wi  
new R  
resea  
ing  
ns.  
staff  
nsist  
V. Mo  
Pro  
an  
oine  
er a  
of G  
who



# DEPARTMENT OF ANATOMY

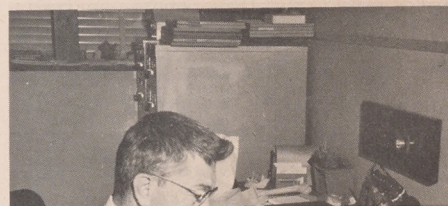
*by Ion Monie*

Department of Anatomy is situated on the 13th and 14th floors of the Medical Sciences building, a location it has occupied since 1958 when it was transferred from the Life Sciences Building, Berkeley, and reunited with its sister department in San Francisco. This brought to an end a period of exile begun in 1906 when it was necessary to relocate First Year Medicine instruction in Berkeley.



Dr. Monie offers a course on congenital abnormalities, received the Senior Class Award for Excellence in Teaching in 1960. For the past four years he has held the office of State Curator, an appointment concerned with the allocation of unclaimed and willed remains for medical and scientific purposes in Northern California. His primary research interest is the production of congenital malformations by teratogenic agents, an area in which he enjoyed the valued cooperation of the late Dr. Marjorie M. Nelson for many years. He is especially interested in abnormalities of the cardiovascular, urogenital, and nervous systems. Dr. Monie is currently President-Elect of the Teratology Society.

Dr. Lyons awarded the Legion of Merit, U.S. Army. Dr. Lyons is senior author of the "Atlas of Peripheral Nerve Injuries", written jointly with B. Woodhall and published in 1949. Dr. Lyons is widely known for his work on reproduction and lactation, the effect of hormones on mammary cancer, and other endocrine studies. He was designated Faculty Research Lecturer (1963-64) in recognition of his distinguished research in the field of endocrinology.



## ALUMNI-FACULTY ASSOCIATION BULLETIN

SCHOOL OF MEDICINE, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CALIFORNIA

0.4

SPRING 1964

to ease space problems in the School resulting from damage to the San Francisco earthquake and that year.

In the present campus building, which is completed in 1966, the department will acquire additional space in new Health Sciences Instruction Research buildings to house its ongoing teaching and research programs.

Staff of the Department of Anatomy consists of the following:

V. Monie, M.B., Ch.B (Glasgow) Professor of Anatomy, and an of the Department since he joined the staff twelve years after appointments in the University of Glasgow and Manitoba. Dr. Monie who teaches gross anatomy and

Widely experienced in comparative as well as human anatomy, Dr. Miller also undertakes research on auditory mechanisms and reptilian endocrinology. Each year he spends time in the Southern California desert collecting specimens for his comparative studies. Dr. Miller also holds the position of Research Anatomist in the Biomechanics Laboratory.

William R. Lyons, Ph.D. (U.C. Berkeley) 1932, M.D. (Duke) 1950, Professor of Anatomy, has instructed in histology since he joined the staff in 1927. His connection with the department was broken only during World War II when he was a pathologist at the Walter Reed and Halloran General Hospitals (1944-46); following the latter period of service he was

William O. Reinhardt, M.D. (U.C. San Francisco) 1938, Professor of Anatomy, joined the staff in 1939. He became Chairman in 1956, a position he held until 1963 when he was appointed Dean, School of Medicine. Dr. Reinhardt is a gross anatomist whose studies on lymph flow and the output of lymphocytes have received wide attention. He was a Visiting Professor of Anatomy, University of Bristol (1954-55) and again at the University of Indonesia, School of Medicine, Djakarta (1955-56). Deeply interested in matters of medical education, Dr. Reinhardt was the first recipient in 1961 of the Alan Gregg Traveling Fellowship for studies of Medical Education in Japan and the Far East. An outcome of this has been the compilation of a history of anatomy in Japan.



Page 2

# UNIVERSITY OF CALIFORNIA SCHOOL OF MEDICINE

## GRADUATING CLASS OF 1964 - INTERNSHIP APPOINTMENTS

NAME	HOSPITAL	NAME	HOSPITAL	NAME	HOSPITAL
ABRAMS, Jon	II & IV Medical Harvard Boston City Hospital Boston 18, Massachusetts	FRANCIS, Jonathan	Kaiser Foundation Hospital 2425 Geary Boulevard San Francisco 15, California	LONG, Richard D.	Sacramento County Hospital 2315 Stockton Boulevard Sacramento, California
ADACHI, Roy T.	Orange County General Hospital 101 Manchester Avenue	FREDRICK, Gerard R.	Harbor General Hospital 1124 W. Carson Street	LYSS, Robert S.	Martin Army Hospital Fort Benning Columbus, Georgia

Herbert Evans  
Library  
History Room  
Tape recording



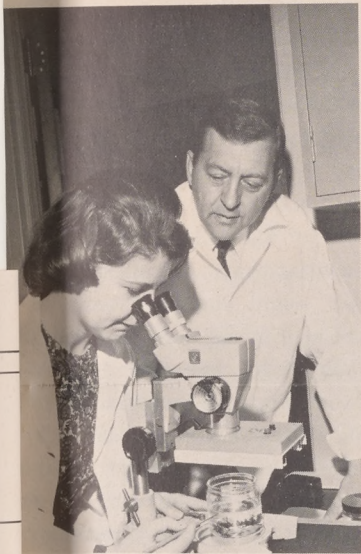
# DEPARTMENT OF ANATOMY

*by Ion Monie*

Department of Anatomy is situated on the 13th and 14th floors of the Medical Sciences building, a location it has occupied since 1958 when it was transferred from the Life Sciences Building, Berkeley, and reunited with its sister department in San Francisco. This brought to an end a period of exile begun in 1906 when it was necessary to relocate First Year medicine instruction in Berkeley.

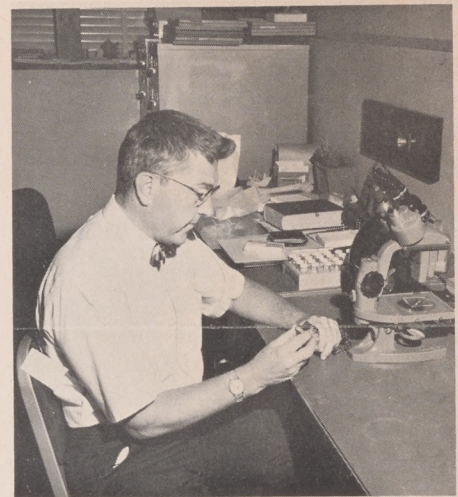
offers a course on congenital abnormalities, received the Senior Class Award for Excellence in Teaching in 1960. For the past four years he has held the office of State Curator, an appointment concerned with the allocation of unclaimed and willed remains for medical and scientific purposes in Northern California. His primary research interest is the production of congenital malformations by teratogenic agents, an area in which he enjoyed the valued cooperation of the late Dr. Marjorie M. Nelson for many years. He is especially interested in abnormalities of the cardiovascular, urogenital, and nervous systems. Dr. Monie is currently President-Elect of the Teratology Society.

awarded the Legion of Merit, U.S. Army. Dr. Lyons is senior author of the "Atlas of Peripheral Nerve Injuries", written jointly with B. Woodhall and published in 1949. Dr. Lyons is widely known for his work on reproduction and lactation, the effect of hormones on mammary cancer, and other endocrine studies. He was designated Faculty Research Lecturer (1963-64) in recognition of his distinguished research in the field of endocrinology.



Monie and Miss L. Bertone discuss abnormalities produced in rat embryos by methyl salicylate administered during pregnancy.

Malcolm R. Miller, Ph.D. (U.C. Los Angeles) 1943, M.D. (U.C. San Francisco) 1945, Professor of Anatomy and Vice Chairman of the Department, was on the staff of Stanford University before coming to the Medical Center in 1958; he is in charge of the gross anatomy course. A former Guggenheim Fellow (1955-56), he spent four months at the University of Gothenburg in 1961 as a research investigator pursuing his interest in nerve endings. Widely experienced in comparative as well as human anatomy, Dr. Miller also undertakes research on auditory mechanisms and reptilian endocrinology. Each year he spends time in the Southern California desert collecting specimens for his comparative studies. Dr. Miller also holds the position of Research Anatomist in the Biomechanics Laboratory.



Dr. M. Miller contemplates internal ear structure on an alligator.

to ease space problems in the Medical School resulting from damage to the San Francisco earthquake and the year.

In the present campus building, when it is completed in 1966, the department will acquire additional space in new Health Sciences Instructional Research buildings to house its teaching and research.

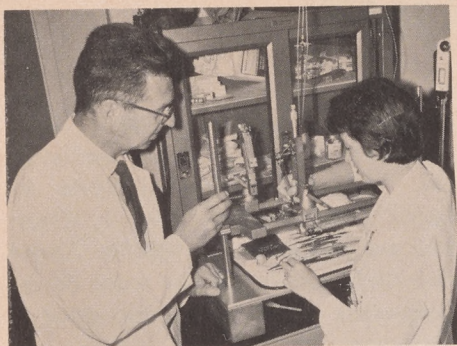
staff of the Department of Anatomy consists of the following:

V. Monie, M.B., Ch.B (Glasgow) Professor of Anatomy, and an of the Department since joined the staff twelve years after appointments in the University of Glasgow and Manitoba. Dr. who teaches gross anatomy and

William O. Reinhardt, M.D. (U.C. San Francisco) 1938, Professor of Anatomy, joined the staff in 1939. He became Chairman in 1956, a position he held until 1963 when he was appointed Dean, School of Medicine. Dr. Reinhardt is a gross anatomist whose studies on lymph flow and the output of lymphocytes have received wide attention. He was a Visiting Professor of Anatomy, University of Bristol (1954-55) and again at the University of Indonesia, School of Medicine, Djakarta (1955-56). Deeply interested in matters of medical education, Dr. Reinhardt was the first recipient in 1961 of the Alan Gregg Traveling Fellowship for studies of Medical Education in Japan and the Far East. An outcome of this has been the compilation of a history of anatomy in Japan.



## DEPARTMENT OF ANATOMY *Continued from page 3*



Dr. J. de Groot and Mrs. C. Hosemann prepare to undertake a stereotaxic experiment on rat brain.

John B. deC.M. Saunders, M.B., Ch.B. (Edinburgh) 1925, F.R.C.S. (Edinburgh) 1930, Professor of Anatomy, joined the Department in 1931. In 1937 he succeeded Dr. I. McLaren Thompson as chairman, relinquishing this position in 1956 when he was appointed Dean, School of Medicine. In 1958 he became Provost of the Medical Center and in January 1964, was elevated to Chancellor. Dr. Saunders, in spite of his many duties, still finds time to lecture on gross and applied anatomy, and on medical history; he is the author or co-author of many scholarly papers and several books on medical history. Dr. Saunders' research interests are wide in range and include studies on gait, joint movements, the intervertebral disc, and amelogenesis. A recent publication on the development of the human heart was undertaken with Dr. Pieter de Vries, Research Associate, Department of Anatomy.

Herbert M. Evans, M.D. (Johns Hopkins) 1908, Professor of Anatomy Emeritus and Director Emeritus, Institute of Experimental Biology, Berkeley, has received many honors and degrees from universities and institutes throughout the world and has been a constant source of encouragement and guidance to investigators in this department and elsewhere. Perhaps best known for his studies on the development of the vascular system, vital dyes, growth hormone, the estrous cycle in the rat, and for the discovery of Vitamin E, Dr. Evans is the author or co-author of over 600 publications. In his "retirement" he has found time to instruct in histology,

to lecture in medical history and to prepare scientific papers. Chosen as the Faculty Research Lecturer, University of California in 1925, he again received this distinction in 1959.

Miriam E. Simpson, Ph.D. (U.C. Berkeley) 1921, M.D. (Johns Hopkins) 1923, Professor Emeritus of Anatomy and Director Emeritus, Institute of Experimental Biology, Berkeley, formerly was in charge of instruction in histology. Dr. Simpson has gained wide recognition for her studies in hematology, endocrinology, and mammalian reproduction. Author of many publications, her most recent work (with Dr. G. van Wagenen) is a monograph on the development of the human and macaque ovary and testis from conception to menarche.

Jack de Groot, M.D., 1948, D.M. (Amsterdam) 1952, Associate Professor of Anatomy, received his medical training first in Indonesia then in Holland. He joined the staff in 1959 after appointments in Baylor University and the University of California at Los Angeles. A recipient of a U.S.P.H.S. Research Career Development Award, he has had extensive training in neuroanatomical research and has worked on the pituitary and hypothalamus with Dr. Geoffrey Harris, now Professor of Anatomy, Oxford. Dr. de Groot teaches neuroanatomy and in 1962 was recipient of the Distinguished Teaching Award. His research interests are mostly concerned with the limbic system, the hypothalamus, and neurosecretory mechanisms. He has constructed an atlas of the rat brain which enables the accurate location of lesions when employed with the stereotaxic apparatus he has designed. Dr. de Groot is closely associated with the Interdisciplinary Research Training Program.

Bill C. Garoutte, M.D. (U.C. San Francisco) 1945, and Ph.D. (U.C. Berkeley) 1954, Associate Professor of Anatomy and Neurology, instructs in neuroanatomy and joined the Department in 1949. He is also Associate Director of the Electroencephalo-

graphy and Electromyography Laboratories. A Fulbright Scholar in 1950-51, Dr. Garoutte was Professor of Anatomy and Neurology at the University of Indonesia, 1956-57 and in 1963 spent a year as Visiting Associate Professor at the Institute of Brain Research, University of Tokyo. Dr. Garoutte is primarily interested in the physiology of the cerebral cortex and in the combined morphological and electrophysiological approaches to this work. Other interests include the binding of sodium, potassium, and bromide in the brain, and the physiology of the corpus callosum.

Tetsuo Hayashida, Ph.D. (U.C. Berkeley) 1956, Associate Professor of Anatomy, has been a staff member for eight years and is in charge of the histology course. The recipient of a U.S.P.H.S. Research Career Development Award, Dr. Hayashida has spent the past year at the All India Institute for Medical Research, New Delhi, where he is presently a consultant on reproductive and endocrine problems. Dr. Hayashida is especially interested in the application of immunological techniques to the study of the endocrine system and one of his investigations is the production of antisera to "unmodified" pituitary gonadotrophic hormones.

Alexander N. Contopoulos-Ioannidis (Athens) 1948, Ph.D. (U.C. Berkeley) 1955, Assistant Professor of Experimental Biology, Berkeley, was formerly a member of the Institute of Experimental Biology, Berkeley.



Dr. A. Contopoulos examines a rat in maternal-fetal transfer studies.



aphyeds for medical care demand pro-  
par in ss in the educational programs to  
was ch these changes.  
and Ne Trujillo, like other cities, is chang-  
ia, from a quiet colonial town into a  
nt sit er of national and international  
e. P merce. The prehistoric capital for  
arch, whole of northern Peru, Trujillo is  
utter the cultural center for an area  
the h a rapidly expanding and diversi-  
and g economy of agriculture, fisheries,  
l elev, and petroleum. The lagging  
es tus of medical care in Peru is re-  
st incted by the low ratio of physicians  
otass population in the Department of  
the ch Trujillo is the capital - one  
sician for 5,000 persons. (For  
Ph. lu as a whole the ratio is 1 - 2,300)  
ate hlarly, needs for hospital and other  
statl facilities have lagged behind  
in rapid growth in the economy and  
The he population.

#### MEDICAL EDUCATION IN PERU

Dr. The rising demands for physicians  
ear amulated development of the new  
ical lical Center in Trujillo and provid-  
s er pressure for acceleration of train-  
e ctive and development of services.  
ally thin this setting the Project Hope  
immered with its support of the Medical  
y of ter during the critical period of its  
tions ly growth. It is planned to maintain  
tiser icipation of the Project Hope for a  
ry g year period ending in 1966, with  
expectation that the University of  
poulo lillo School of Medicine and the  
U.C. lical Center will be well estab-  
sor of ed by that date. During the first  
the intensive participation by the  
Berke ect Hope was offered through use  
e Hope hospital ship. Subsequent-  
e Hope staff was reduced to about



Burn patient Rosita with Peruvian trainee nurse.

20 persons and was based in the city, freeing the ship to move to another program site.

During the initial eleven-month period the Hope Staff provided a complete training program for 12 students of auxiliary nursing, offered training courses and preceptorships for 65 graduate nurses, and gave in-hospital training to 53 physicians. These programs were made possible by the use of the hospital ship for teaching programs. The ship served as a setting for demonstration as well as practical training, and as a focal point for a wide-ranging program of teaching activities. Others who received training included the students of medicine, technicians, and paramedical personnel.

After this period of intensive programs at Trujillo, the ship was sent elsewhere and the programs continued by a team of physicians, nurses, and others based within the city and working in the newly-completed teaching hospital. The continuation program, besides carrying on teaching, will participate in development of the new hospital facility until 1966.

Among the first members of the Project Hope staff to arrive in Peru early in 1962 were William S. Folger, assistant clinical professor in the Department of Medicine, who helped organize the program in internal medicine; Ethel Black, administrative assistant of the Department of Obstetrics and Gynecology, who served the Project as chief of the admitting unit; and Jean Radtke, administrative assistant of the Department of Otolaryngology, who served as executive aide

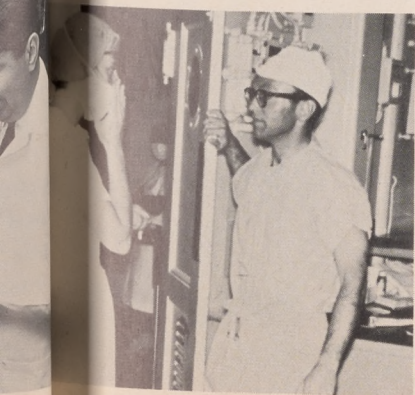
to the Hope hospital administration. During a ten-month period Ethel and her associates admitted 1,616 patients to the hospital ship Hope as well as training Peruvian apprentices in medical administration. The total professional and technical staff of the hospital ship, excluding physicians and dentists, was 68 persons. They not only carried on preceptor training of their Peruvian counterparts in the departments of the hospital, but also operated a busy general hospital and clinic. The ship provided a compact medical center which, besides 120 beds (of which 22 served as hospital quarters for nurse trainees and nurse assistant students), included laboratories and x-ray, dental clinic and surgery, operating suite and surgical clinics, library and offices, staff quarters and ancillary services.

#### OBSTETRICS

Among the thirteen obstetricians who participated as rotators during the first year program were Alan J. Margolis and John S. Miller of the Department of Obstetrics and Gynecology at UC Medical Center. A contribution by Doctor Miller, not related to the field of obstetrics, was in the person of his son David, who worked as a volunteer for most of a year with the milk distribution program of the Project. Doctors Margolis and Miller played a leadership role in the demonstration and preceptor program in their specialty. The central function of this department of the Project Hope in the first year was the intensive training of 8 Peruvian physicians in obstetrics and gynecology, each for a two-month period. In addition to medical activi-



Ethel Black admitting patient.



Alan Margolis and nurse anesthetist, studying.



## Project Hope – Continued from page 9

ties on the ship, these physicians operated an outpatient clinic in Trujillo and worked in the Department of Obstetrics at the charity hospital used by the medical school. In each setting they worked with medical students as well as nurse and physician trainees. These U.C. obstetricians followed in some of the paths made a year earlier by Gilbert Webb and Philip Myers with the Hope program in Asia.

The importance of an obstetrics training program is evident from the hospital statistics of Peru, which show childbirth and complications of pregnancy to be the leading cause of hospitalization in Peru and, in fact, to account for over a fourth of all hospital admissions. This is in spite of the fact that the vast majority of pregnancies and births in Peru occur without benefit of hospital or physician.



Physiotherapy for polio patient.

### PEDIATRICS

A prime teaching objective for the Project Hope in Peru was improvement of the treatment of ill children, since high infant and child mortality rates result in great losses to the country. Children account for about 15 percent of all patients hospitalized in Peru and an appreciable number of the total deaths. The leading causes of illness and death in children are infectious conditions, especially gastroenteritis and tuberculosis. Two members of the faculty of the Department of Pediatrics, Jean Kohn and Rainer Arnhold\*, working with the pediatric faculty of the University of Trujillo, aided in early planning and operation of a successful program in this specialty. A notable innovation of these physicians was the development of a clinic within a poor suburban district of the city. The clinic was utilized for training of medical students.

\* Rainer has just returned from a rotation period with the Ecuadorian Hope project at Guayaquil.



Rainer Arnhold in Esperanza Clinic.

A manifestation of the population explosion, the suburban squatter communities of straw or adobe houses develop almost overnight on the edges of the great Peruvian cities. They are a focal center for a multitude of health problems as well as social problems.

### SURGERY

Neurosurgery had been practiced in Peru for over 1,000 years, and today it remains an important specialty among the physicians of the country. The interest of the Peruvians in this field resulted in development by Project Hope of an outstanding preceptorship program for surgeons in this specialty. The program offered special short residency to three Peruvian specialists, as well as medical school and nurse training. John Adams was the participating neurosurgeon; he was followed by a number of equally distinguished men from this field associated with the cooperating Neurological Society of America.

Surgery was a major program of the Project Hope since the hospital ship was particularly well suited to teaching of this specialty. Modern techniques of general surgery as well as of special fields were demonstrated to and then employed by trainee physicians. The skilled methods of post-operative care and intensive care nursing were taught to nurse trainees and student nurse assistants as well as to physicians in traineeships. The Department of Surgery was represented by Raymond Kauffman, assistant clinical professor, during the months of November and December 1962.

### MEDICINE

Initiated by Doctor Folger, the program of internal medicine was continued with the participation of Alfred Childs, clinical instructor, Medicine; M.J. Franzblau, clinical instructor, Dermatology; and Dorothee and Philip Perloff, assistant clinical professors, Medicine. In general practice, U.C. alumni were represented by J. Paul Wayne. These physicians are but a few of the 28 internists and general

practitioners who have taken the program in Trujillo since beginning.

The Doctors Perloff,\* who with the Peruvian Hope project fall of 1963, plan to continue or more with the program in the Medical Center. The Perloffs, the time being view themselves Trujillanos, have worked with the Department of Medicine of the of Medicine and have been teachers of the new generation Peru's physicians. Dorothee in a recent letter that she completed teaching a course ology and that Phil has been vising a teaching ward of the hospital.

These Californians who have in Trujillo have been gratified the emergence of a strengthened improved medical school as of their efforts. Project Hope small part in the stimulation of demic growth reflected by the designation of the new Regional pit as a **Centro de Salud Do Trujillo** – the first such designated teaching hospital country.

Those who have participated Project Hope have held the biased view that it is a highly while program for attainment goal of improved international standing. A similar view of Peruvian physicians was Dr. Fernando Cabieses Molinal talk to a meeting of a committee the House of Representatives teaching of medical and paramedical personnel, the organization of medical school, the training of skilled hospital labor, have to be the most excellent social tools to reach thorough understanding between two human groups, of the language and cultural barriers.



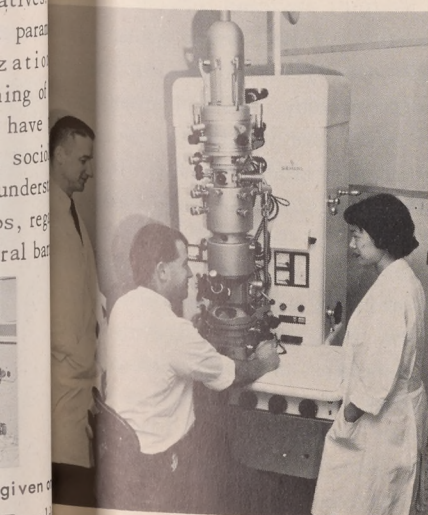
Electroencephalogram being given

\* Their address is: Facultad de Medicina, Universidad Nacional de Trujillo, Trujillo, Peru. S.A.



who the staff in 1956. Dr. Contopoulos teaches histology and undertakes research in hematology and endocrinology. Fetal endocrinology has come to be his major interest and by means of radioactive tracers he has observed the transfer of thyroid hormones and the relationship between mother and fetus. During 1963-64 Dr. Contopoulos spent several months with Dr. E.C. Amoroso, Royal Veterinary College, London, investigating fetal-maternal relationships.

Joel J. Elias, Ph.D. (U.C. Berkeley) 1958, Assistant Professor of Anatomy, has been a staff member of the Department of Anatomy for the past six years. He instructs in histology and is concerned with the application of tissue and organ culture techniques to normal and neoplastic tissues. In 1963 he was invited by Dr. Yale Topper to spend part of the summer at the National Institute of Arthritis and Metabolic Diseases, Bethesda, in cooperative research. Laurel E. Glass, Ph.D. (Duke University) 1958, Assistant Professor of Anatomy, came to the Department six years ago and teaches gross anatomy and experimental embryology. Dr. Glass is principally concerned with the applications of immuno-histology, irradiation, and fluorescent microscopy to the elucidation of maternal-fetal protein exchange in oogenesis. She has also studied the development



S. Wissig, Dr. T. Heath (Australia) and Miss S. Ikeda discuss the application of electromicroscopy to lymphatic studies.

of irradiated and non-irradiated transplanted mouse eggs. This coming year Dr. Glass will spend several months working in the laboratory of Dr. C. Lutwak-Mann, Cambridge.

Henry H. Weisengreen, D.D.S. (Maryland) 1925, Assistant Professor of Anatomy, joined the University in 1949. He teaches gross anatomy and is a Consultant in Anatomy, National Board of Dental Examiners. An oromaxillo-facial surgeon, Dr. Weisengreen has made a special study of the principal nerve pathways involved in orofacial pain. Presently, his research is mainly concerned with electromyographic studies on the facial muscles of patients with myalgias, and with age changes in the temporomandibular joint.

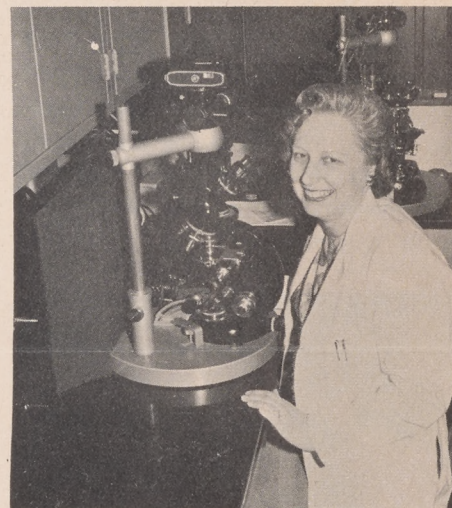
Steven L. Wissig, Ph.D. (Yale) 1956, Assistant Professor of Anatomy, came to the Department in 1958 following a Fellowship in Medical Sciences at the Rockefeller Institute, New York. Dr. Wissig teaches histology and in the spring semester offers a course with Drs. Glass and Elias on the "Biology of the Cell." An electron microscopist, he is especially interested in the ultrastructure of the thyroid gland and of the renal epithelia. He is also concerned with capillary permeability and employs the transference of ferritin to aid in these studies.

Lowell L. Sparks, M.D. (U.C. San Francisco) 1956, Research Assistant, instructs in histology and shares his time with the Department of Anatomy and the Metabolic Institute. The recipient of the Borden Award for excellence in undergraduate research, Dr. Sparks came to the Department in 1962 after being an internist with the U.S. Air Force in Japan. Dr. Sparks is interested in the secretion of cortical hormones, stress phenomena, and the response of mammary cancer to hormones.

George N. Byram, Jr., M.D. (Tulane) 1960, Instructor in Anatomy, has been teaching gross anatomy and histology during the past year following service with the U.S. Air Force. Dr. Byram

will commence training in orthopedics this summer.

Ralph C. Hawkins, M.D. (Harvard) 1933, Lecturer in Anatomy, is in charge of the neuroanatomy instruction. Over several years he has built up excellent student loan sets of brain stem sections with the technical assistance of Mrs. Karina Metten. In the spring semester he gives instruction in anatomy to pharmacy students. A practicing neurosurgeon, Dr. Hawkins is especially interested in the basal ganglia in Parkinsonism.



Dr. L. Glass with ultraviolet microscope used to study fluorescent antibodies in ova of mouse.

Harold H. Lindner, M.D. (U.C. San Francisco) 1933, Associate Clinical Professor of Surgery and Lecturer in Anatomy, received his medical training at the University of California, San Francisco. In addition to surgical practice and teaching, Dr. Lindner gives instruction on Regional and Topographical Anatomy at San Francisco County Hospital. Dr. Lindner has undertaken studies on the anatomy of the perineum, anomalies of the duodenum, and on the structure of the lung.

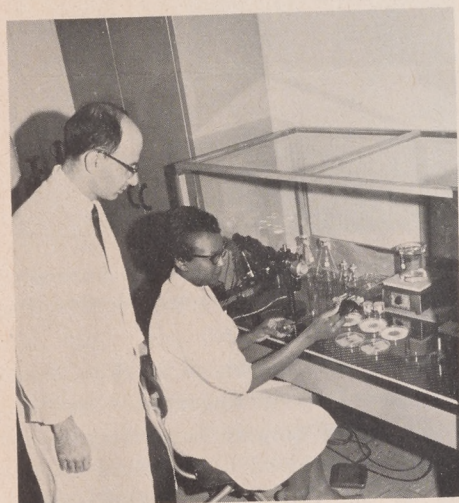
William R. Mehler, Ph.D. (Maryland) 1959, Lecturer in Anatomy, has instructed in neuroanatomy since 1962. He is also Chief, Section on Experimental Neuroanatomy, NASA, Ames Research Center, Mountain View, and prior to this appointment spent seven years with Dr. Walle Nauta. Dr. Meh-



## DEPARTMENT OF ANATOMY *Continued from page 5*

ler's research interests have been concerned with the sympathetic system, the "pain tract" in mammals, axon degeneration, and the connections of the lentiform nuclei.

Gerhardt von Bonin, M.D. (Freiburg i. Br.) 1915, following appointments in Germany, China and Holland, joined the Department of Anatomy, University of Illinois in 1930, remaining there until his retirement in 1958. Since 1960 he has been a Lecturer in Anatomy at the U.C. Medical Center. A distinguished neuroanatomist, Dr. von Bonin is widely known for his cytoarchitectural studies of the cortex of man and other animals and for his contributions to physical anthropology; for many years he was managing editor of the *Journal of Comparative Neurology*. Dr. von Bonin instructs in the neuroanatomy course.



Dr. J. Elias and Mrs. R. Armstrong compound culture media for rat embryo eyes.

Gale G. Clark, M.D. (Cincinnati) 1942, Lecturer in Anatomy, has instructed in neuroanatomy for the past two years. Dr. Clark is Chief of Neurological Surgery, U.S. Naval Hospital, Oakland, and Senior Neurological Surgery Consultant to NASA Project Mercury. He has published several articles mostly concerning neurosurgical methods and procedures.

Bernard T. Donovan, Ph.D. (London) 1954, Visiting Assistant Professor of Anatomy, has instructed in histology during the past academic

year. Dr. Donovan is Senior Lecturer in Physiology, Department of Neuroendocrinology, Institute of Psychiatry, Maudsley Hospital, London, and has held guest appointments in institutes in Sweden, Hungary, and Czechoslovakia. He is a co-worker of Professor Geoffrey Harris and is author or co-author of numerous papers on neuroendocrinology. He is particularly interested in the mechanisms of estrus and lactation, and the effect of light on ovulation. He is co-author of a new monograph on neuroendocrinology and is currently preparing a monograph with van der Werff ten Bosch on the physiology of puberty.

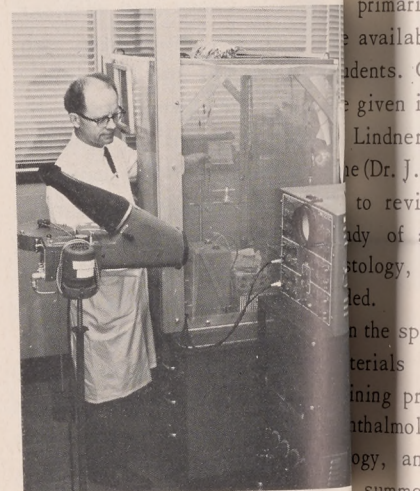
Teh Ping Lin, Ph.D. (U.C. Berkeley) 1953, has been an Assistant Research Anatomist since 1960. His research is concerned with the use of genetic markers, and the micromanipulation and transplantation of mouse ova.

In 1960 a subdivision of the Department of Anatomy was established in Experimental Endocrinology. In addition to Dr. W.R. Lyons and Dr. T. Hayashida, the staff comprises: C.H. Li, Ph.D. (U.C. Berkeley) 1938, Professor; Ardis T. Lostroh, Ph.D. (U.C. Berkeley) 1956, Assistant Professor; Phil G. Squire, Ph.D. (U.C. Berkeley) 1957, Assistant Professor; and Harold Papkoff, Ph.D. (U.C. Berkeley) 1957, Assistant Professor. The distinguished work of Dr. Li on the anterior pituitary hormones has brought him and his co-workers worldwide recognition. The association of this outstanding group with the Department of Anatomy provides exceedingly fine opportunities for the expansion of instruction and research in endocrinology. The Hormone Research Laboratory which Dr. Li directs will eventually transfer to the San Francisco Campus.

A close liaison is maintained with the Department of Dental Anatomy under the direction of Russell T. Coleman, D.D.S. (Toronto) 1946, Associate Professor, and his colleagues, J.A. McDowell, D.D.S. (U.C. San Francisco) 1943, Associate Clinical

Professor, and William Kaiser, gross (U.C. San Francisco) 1945, Associate Professor. The staff of the Department of Anatomy, School of Medicine, provides occasional assistance for lectures in gross anatomy and histology.

Besides giving instruction to Dr. A. (soon to be 128) First Year students, the Department of Anatomy offers courses and opportunities for original investigation to academic students seeking M.D., Ph.D. degrees in Anatomy and research training. The Department provided post-doctoral fellowships and foreign exchange faculty.



Dr. B. Garoutte positioning a shielded electrode inside shielded cage, oscilloscope.

Medical students receive instruction in three disciplines: gross anatomy (225 hours), histology (192 hours), and neuroanatomy (128 hours). Courses are available for academic students. The Department has a laboratory looking North the Golden Gate and Marin among dissecting rooms with clear glass windows and a view. Four students are allowed one cadaver and each student has a loan set of bones. For the past years television has been used for demonstrating certain gross anatomy and neuroanatomy. Increasing use of this medium is anticipated. Neuroanatomical dissection is undertaken to some



gross anatomy laboratory but principally in the histology laboratory which is shared with the microscopic anatomy course. Loan collections of slides for both courses are issued to each student. Many of the excellent histology slides are the work of the Dr. A.A. Koneff and Mrs. Marjorie Evans now retired.

In addition to the three major courses, the Department of Anatomy has offerings on the biology of the eye, congenital anomalies, experimental embryology, and experimental endocrinology, the last-named through the subsection of Experimental Endocrinology; these courses, while intended primarily for academic students, are available as electives to medical students. Courses in applied anatomy are given in Third Year Medicine (Dr. Lindner) and in Fourth Year Medicine (Dr. J.B. Saunders) and opportunities to review or undertake intensive study of aspects of gross anatomy, histology, and neuroanatomy is provided.

In the spring semester facilities and materials are available for resident training programs in Anesthesiology, Ophthalmology, Orthopedics, Otolaryngology, and Plastic Surgery. During summer months the facilities of the Department are used by students who participate in the Summer Research Fellowship Program under the direction of staff members.

The Department of Anatomy is well equipped to undertake its teaching and research programs and contains photographic and autoradiographic facilities, cold room, constant temperature rooms, chemical laboratory, histology rooms, animal autopsy room, kitchen for nutritional studies, a special instrument room, and all the equipment found in a modern biological research laboratory. Presently, there is one electron microscope under the care of Dr. S. Wissig, and a second, to be used jointly with the Cardiovascular Research Institute, is being installed. The Department maintains its own rat breeding colony which supply Long-Evans rats, which are

used in many staff investigations.

Research at the post-doctoral level is being undertaken currently by Dr. Ronald Gellert on neural feedback mechanisms involved in ovulation, by Dr. Shoji Shintani\* (Tokyo) on the development of choriocarcinoma, and by Dr. Trevor Heath (Australia) on the connections between lymphatics and blood vessels following thoracic duct ligation. As visiting physicians from Indonesia, Dr. Kian Gwan Kho is studying the effect of tetracycline on fetal rat development and Dr. Ros Soewasono is investigating the fetal membranes of *Xantusia vigilis*.

Pre-doctoral investigations presently being conducted in the Department



Dr. R. Soewasono (Indonesia) prepares to remove the reptilian pancreas.

are: Mrs. Rosa Armstrong (response of embryonic rat eyes to environmental factors *in vitro* and *in vivo*); Dr. Michael Dumas (teratogenic action of vitamin A acid on fetal rat development); Mr. Don Matthies (isolation of placental mammatrophin in the rat); Miss Kathleen Conrey (limbic system influence on the gonadotrophin release from the pituitary); Mrs. Lenore Disher (organ culture studies on the submaxillary salivary gland of male and female mice); Dr. Thomas Christy (morphology of the renal medulla and papilla in the normally hydrated rat);

\*Under the auspices of the Department of Obstetrics and Gynecology, and Anatomy.

Mr. Dan Graney (transfer of ferritin across the intestinal epithelium of the newborn rat); Mr. Bernard Slavin (effects of hormone on brown adipose tissue); Dr. Robert Greenlaw (functional anatomy and biomechanics of the hip joint); Mr. Nazir Ahmad (perfusion studies of rat mammary gland); and Mr. Henry Murphy (effect of FSH on Sertoli cells in hypophysectomized rats).

Currently engaged in research for the master's degree are Miss Leonida Bertone (teratogenic effect of methyl salicylate and hypoxia on rat fetuses); Miss Lynette Feeney (passage of ferritin from anterior chamber to the canal of Schlemm in human and primate eyes); Mr. Philip Kopriva (role of olfaction in ovulation); and Dr. Alan Bradley (protein synthesis in the thyroid gland).

Over the years the Department of Anatomy has been fortunate in having guest lecturers from other disciplines convey their specialized knowledge to students at appropriate stages of their anatomical studies; thus lecture-demonstrations on radiological anatomy are presented each year by Dr. Earl Miller, Department of Radiology, and demonstrations of the living eye, ear, nose and throat, are given annually by the staffs of the Department of Ophthalmology and the Division of Otolaryngology. Demonstrations of neurological conditions which illustrate aspects of neuroanatomy are provided through the cooperation of the Department of Neurology. In this way every effort is made to correlate structure with function and to associate anatomical knowledge wherever possible with that which the student acquires in other disciplines.

In 1965, the Department of Anatomy will be host to the Annual Meeting of The Teratology Society and has been chosen as the location of the American Anatomical Society Meeting in 1966; the latter occasion anticipates an attendance of over 1200 and Local Committee plans under the chairmanship of Dr. Malcolm Miller are already under way.





The S.S. HOPE at anchor off Salaverry in northwestern Peru.

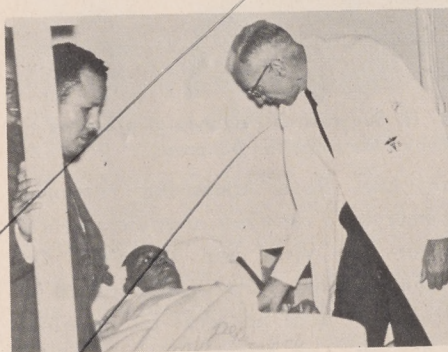
## PROJECT HOPE

by Alfred Childs, M.D.

Interest in Project Hope as an experiment in international cultural exchange in medicine, as well as participation in it by a number of alumni, faculty, and staff of the University of California, have led to discussion of this program at the Medical Center. In order to contribute to this and to report some of the contributions of persons from U.C. this story is written.

Project Hope is the chief program of a voluntary agency (1) organized to promote international understanding through a medical exchange program. The goal of international understanding is approached through educational programs carried out in collaboration with the local medical and educational institutions of the host country. The

(1) People-to-People Health Foundation, Inc., 1016-20th St., N.W., Washington, D.C. 20036. President William B. Walsh, M.D.



Dr. John Adams in ward on ship with Peruvian doctors.

Hope project in Peru, which began in 1962, was at the northern Peruvian city of Trujillo in association with the School of Medicine of the National University of Trujillo; a program was undertaken on the invitation of the Dean of the School of Medicine there and the leaders of the medical profession of the country. The prime educational objective was to aid in the development of the new medical center;

in 1962 the medical school was in its fourth year of operation and had gaps in available facilities for training as well as vacant positions in several special fields on the staff. Another objective was the training of nurses as well as various paramedical persons with the view to help staff a new regional hospital under construction by the government which was to become a teaching hospital for the school of medicine.

The needs for rapid expansion of the facilities for education in medicine and allied fields in Peru are related to the revolutionary changes in the society and culture of that country which is undergoing industrialization. Peru emerges to become one of the nations of South America among the nations of South America with problems associated with rapid development, changing patterns of living, profound agricultural and industrial innovations, and the



# SOME MEDICINE AND LIFE IN SURABAJA

The Indonesian people are very friendly, pleasant, and very friendly. However, English has been reduced, and is being taught in secondary schools. Most children go to school until 12 to 15 years of age.

There are now numbers of patients in the outpatient clinics - several thousand each day. In the Pediatric Clinic alone there are 200 to 300 patients with only four attending physicians doing three-four-hour sessions. The same imbalance occurs in the women's well baby clinic in the city. Most of the patients receive little or no treatment at the clinic.

## Medicine in Surabaya

The University of Surabaya is a government institution financed by the Ministry of Health, whereas the medical school, which is under the Ministry of Education, is financed by the Ministry of Education. There are about 1,000 beds in this hospital, and they are usually filled. Many surgical patients wait weeks or months to be operated on because the number of operating rooms and equipment are insufficient. The deficiency of anesthetic machines and trained anesthetists also curtails the amount of surgery. Other problems in the hospital are lack of adequate nurses, food, and particularly drugs. The limited supply of medicines causes them to be reserved for the very serious cases, thus also causing a prophylactic problem.

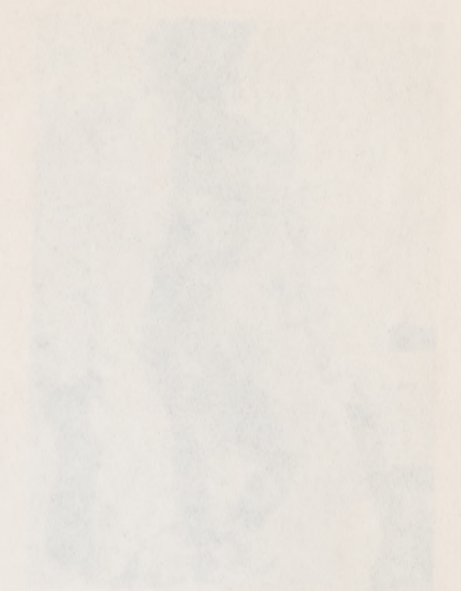
Many of these problems can be solved. We are already purchasing a new amount of equipment, including textbooks for the various clinical departments. The medical departments were well established and equipped when 1959 or 1961. Since a similar project was successfully undertaken at the University of Indonesia in Djakarta, I am sure the University of Surabaya will not fail in this venture.

The supply of physicians is most inadequate. In 1962 there was one physician per 44,000 people. In this medical school there are 365 on the faculty of whom 119 are specialists in special training. In the Republic of Indonesia, 1,000 miles long and 400 miles wide, there are five million people. There are five million people. There are five million people. There are five million people.

## William Anthony Reilly

The Indonesian people are very friendly, pleasant, and very friendly. However, English has been reduced, and is being taught in secondary schools. Most children go to school until 12 to 15 years of age.

In this joint medical school project between the University of Indonesia and Tulane University, I am going to carry for the Visiting American Physicians 10-15, an advisor in the Indonesian State in the various departments: medicine, surgery, pediatrics, obstetrics, gynecology, dermatology, ophthalmology, otolaryngology, radiology, pathology, and pharmacology.



One patient with hydrocephalus. An instance of medical research which includes radiography, a plaster cast, and other medical procedures. The patient is in the hospital, and the medical staff is working on the patient.

One patient with hydrocephalus. An instance of medical research which includes radiography, a plaster cast, and other medical procedures. The patient is in the hospital, and the medical staff is working on the patient.

We have been well received here and the people are very friendly. We have been well received here and the people are very friendly. We have been well received here and the people are very friendly. We have been well received here and the people are very friendly.

It seems that the patient is very healthy and very healthy. It seems that the patient is very healthy and very healthy. It seems that the patient is very healthy and very healthy. It seems that the patient is very healthy and very healthy.

Christmas and New Year are very pleasant and very pleasant. Christmas and New Year are very pleasant and very pleasant. Christmas and New Year are very pleasant and very pleasant. Christmas and New Year are very pleasant and very pleasant.

Food here is quite good and very good. Food here is quite good and very good. Food here is quite good and very good. Food here is quite good and very good. Food here is quite good and very good.

Shopping is very convenient and very convenient. Shopping is very convenient and very convenient. Shopping is very convenient and very convenient. Shopping is very convenient and very convenient. Shopping is very convenient and very convenient.

Dr. William A. Reilly, M.D.







# SOME MEDICINE AND LIFE IN SURABAJA

*Note: The following article was written by Dr. William Reilly while he was Chief of Party for the Visiting American Professors in Surabaya. Dr. Reilly recently returned to the United States.*

Surabaya with a population of 1,500,000 has all the common diseases of the United States and Europe as well as the tropical diseases. Oddly, there are few cases of malaria in the cities. Kidney and bladder stones (even in infants); diseases caused by vitamin deficiency such as particular xerophthalmia; hepatic diseases due to lack of protein; malignancies — especially chorio-epithelioma and primary carcinoma of the liver — seem to occur at earlier ages than in the United States. The parasitic infestations, of course, are widespread and entire villages are infested with malarial forms. Kwashiorkor and marasmus are very common among the infants and children. If a baby is not fed by its mother's milk, he receives only a very low protein diet consisting of rice, rice and other carbohydrates and starches. There is little scurvy as citrus fruits are plentiful. Because of an iodine deficiency there are a large number of goiters; also a considerable number of exophthalmic goiters and. Phrynosoma and psychosis are frequent. Intraorbital meningococci are not rare. However, a peptic ulcer is not too common, nor arteriosclerosis.

In spite of the lack of equipment and instruments, chest surgery and some other surgery is done here by a very able Visiting Associate Professor, Dr. McKain, from Creighton University Medical School. Chronically fibrosed lobes of the lung have been removed, and pyemias of the chest cavity have been treated to many successful opera-

tions. In trying to note how tuberculous meningitis responds so favorably to therapy even though it has existed for some weeks. This meningitis is often complicated by secondary infections and therapy frequently prevents death. Because of the lack of equipment there is much ingenuity shown in the care of orthopaedic cases. Unfortunately, the final cosmetic and functional results are not the best. Patients are coming earlier to physicians during the last few years so there is greater possibility for diagnosis and cure.

There are great numbers of patients in the outpatient clinics — several thousand each day. In the Pediatric Clinic alone there are 200 to 300 patients with only four attending physicians during three-or-four-hour sessions. The same imbalance occurs in the several well baby clinics in the city. Naturally, most of the patients receive little attention since most of the physicians' time is spent on serious problems.

The teaching hospital of Airlangga University is a government hospital financed by the Ministry of Health, whereas the Minister of Education finances the medical school. There are about 1,000 beds in this hospital, and they are usually filled. Many surgical patients wait weeks or months in bed for elective surgery because the number of operating rooms and equipment are insufficient. The deficiency of anesthetic machines and trained anesthetists also curtails the amount of surgery. Other problems in the hospital are lack of adequate nurses, food, and particularly drugs. The limited supply of antibiotics causes them to be reserved for the very serious cases; this also applies to prophylactic tetanus antitoxin.

Many of these problems can be solved. We are already purchasing a vast amount of equipment, including textbooks for the various clinical departments. The preclinical departments were well established and equipped from 1959 to 1962. Since a similar project was successfully conducted at the University of Indonesia in Djakarta, I am sure the University of California will not fail in this venture.

The supply of physicians is most inadequate — in 1962 there was one physician per 44,000 people. In this medical school there are 360 on the faculty of whom 119 are assistants in special training. In the Republic of Indonesia, 3,000 miles long and 95 million in population, there are five fully functioning medical schools and seven that are in the process of being developed. By 1976, it is anticipated that there will be one physician per 13,000 people.

The Indonesian people are very friendly, proud, and shy. Illiteracy has been reduced. English is now their second language and is being taught in secondary schools. Most children go to school until 12 to 16 years of age.

In this joint medical education project between the University of California and Airlangga University, I am Chief of Party for the Visiting American Professors (8-10); an advisor to the Indonesian Dean in the revision of the curriculum, particularly in the clinical departments; Visiting Professor of Pediatrics;



One year old with kwashiorkor

an instigator of medical research which includes radioisotopes; a planner and builder of physical plants (three are in the blueprint stage); and advisor to the Republic of Indonesia on future expansion in medical education.

Since October we have had two visiting friends from the United States, Dr. Joseph Hittelman from Los Angeles, Class of 1936 at UCSF Medical School, and a pediatrician friend from the University of Pennsylvania.

We have been well received here and the people and faculty are very appreciative of our efforts. We have been widely entertained — including a Balinese orchestra and dancers, and another group of fanatical dancers who worked themselves into a frenzy wherein they chewed glass. I have not been on any islands outside of the East of Java, but I understand that there are many beautiful islands to be explored. There are high mountains and snow, for instance in West Irian.

It seems that the greatest needs are agriculture and food, economic stabilization, and diminution of the military budget with demilitarization. The latter has been promised.

Christmas and New Year were very pleasant and were enjoyed by our own group (4 Visiting Professors and families) and with Indonesian friends. The latter remembered us with holiday cards, bouquets, and some presents.

Food here is quite varied and some American food can be obtained. Naturally, there are some items not found on the market. A good hamburger can be had at the new Hotel Indonesia in Djakarta. The fowl is tough (but not foul). We have a very fine cook and several other very helpful servants. Living quarters are fairly well air conditioned.

Shopping is very interesting and quite exotic. There is a goodly supply of Japanese, Chinese and other Oriental varieties such as clothing, silverware, furniture and tableware. Availability of these items in the market is somewhat sporadic.

Au revoir or Sampai Ketemu Lagi.

William A. Reilly, '27

number of children with hydrocephalus have had by-passes successfully performed. Trephining, however, often followed by herniation. It is satis-



Dr. Reilly with native mother and



## REPORT ON HOMECOMING AND ANNUAL BANQUET

The combined Homecoming festivities and Annual Banquet held on May 24th were highly successful. The morning program presented four fascinating talks on a wide range of subjects: "The Neurologist Looks at Vertigo" by Donald Macrae; "The Future of Tissue Transplants", John Najarian; "Birth Control", Donald Minkler; and "Medical Education in Southeast Asia", John W. Brown. During the luncheon which immediately followed, the alumni were privileged to hear from Charles A. Berry, Medical Director of Manned Space Project, N.A.S.A., who gave a first hand

report on the medical problems of aeronautics.

The Banquet was again held at the St. Francis Hotel in the Mural Room. The Class of 1938, celebrating its twenty-fifth anniversary, was host to the graduating Class of 1963. Meyer Schindler, chairman for the Class of 1938 greeted the new graduates, and introduced Pierre Mornell, president of the Class of 1963. He in turn presented the award given by the graduating class to the outstanding teacher of its choice, Dr. Harold Harper. Provost Saunders welcomed the Class of 1963 to the Alumni

Association and wished them their future endeavors.

The business portion of the evening consisted of the election of officers for 1963-1964. H. G. [unclear] chairman of the nominating committee presented the names of Francis Sooy for President; Carl Anderson, President, Northern Area; Walter Stern, Vice-President, Southern Area; Ione Railton, Secretary; and Leavitt, Treasurer. They were unanimously elected. Councilor-at-Large for the year will be past president J. Katz, Edwin J. Clausen, and Carter, Councilor-at-Large.



Host Class Chairman - Meyer Schindler



The Storers celebrate Dr. Ruth's 50th Anniversary



New president, Francis Sooy, and Provost Saunders.



Pierre Mornell presents the "Outstanding Teacher" award to Harold Harper.



24

UNIVERSITY OF CALIFORNIA MEDICAL CENTER  
SAN FRANCISCO 22, CALIFORNIA

SCHOOL OF MEDICINE  
DEPARTMENT OF RADIOLOGY

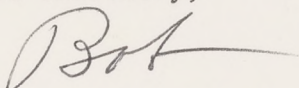
May 8, 1964

Dr. W. E. Carter  
"Tales & Traditions"  
Medical Center Library

Dear Bill:

In lieu of a written report of the history and development of the Department of Radiology, I have made a recording in the Auditory Project which covers most of the data needed. I hope this will be satisfactory to you. I regret that the colleagues that were to help me write the history and I myself have fallen down on the job of getting a written report in Volume VII.

Yours sincerely,



Robert S. Stone, M.D.

RSS:vh

*For details regarding  
the Dept of Roentgenology  
see Dr Stone's tape recording.*



UNIVERSITY OF CALIFORNIA MEDICAL CENTER  
TECHNICAL SERVICES DIVISION

May 8, 1964

Dr. V. E. Caster  
College of Physicians  
Medical Center Library

Dear Sir:

In view of the recent report of the Academy and the findings of the Department of Radiology, I have made a report in the Radiology Division which covers most of the data needed. I hope this will be satisfactory to you. I repeat that the following data was taken from the history and I myself have checked it from the files of Radiology which record in Volume VII.

Yours respectfully,

Robert E. Caster, M.D.

Respectfully



The Journal  
of The  
American  
Medical  
Association

# JAMA

VOL 188 NO 6

MAY 11, 1964



es depicting the history of medicine in California  
ce again on view in Toland Hall at the Uni-  
of California Medical Center, San Francisco.

## CONVENTION NUMBER

Advance Registration and Housing Forms p 294

*San Francisco - 1964*



May 8, 1964

Dear Mr. [Name]:  
I have received your letter of May 4, 1964, regarding the [subject]. I am sorry that I cannot provide a more definitive answer at this time, but the [subject] is still under review. I will contact you again once a final decision has been reached.

I am sorry that I cannot provide a more definitive answer at this time, but the [subject] is still under review. I will contact you again once a final decision has been reached.

Very truly yours,  
[Signature]  
[Name]  
[Title]  
[Address]  
[City, State, Zip]

In the event of a change of address, please notify me immediately. I will be glad to update my records to reflect your new location. Thank you for your cooperation.

Yours sincerely,  
[Signature]  
[Name]  
[Title]  
[Address]  
[City, State, Zip]

MADE IN U.S.A.  
[Faint text and markings at the bottom of the page, including a date stamp and some illegible text.]



# JAMA

VOL 188 NO 6

MAY 11, 1964

Journal  
of The  
American  
Medical  
Association



...ing the history of medicine in California  
...in on view in Toland Hall at the Uni-  
...lifornia Medical Center, San Francisco.

## CONVENTION NUMBER

Advance Registration and Housing Forms p 294

*San Francisco - 1964*

COLOR ILLUSTRATION—Sir Francis Drake observes a surgeon performing an autopsy on his younger brother, while sailors finish the burial of their comrades. This fresco and smaller reproductions, above and left, are part of a panorama of people and problems in the early history of California. They are accessible for your viewing any time classes are not in session in Toland Hall which is at the left far end of the first floor of the old University of California Hospital building. See p 56 for additional information.

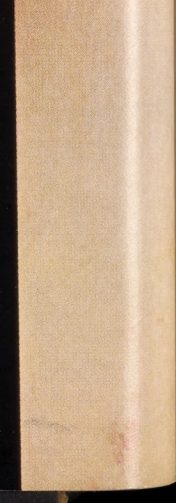


therapeutic agent is not available for simultaneous application. These preparations are usually well tolerated. However, if signs of irritation or sensitivity should develop, application should be discontinued. If a bacterial infection should develop during the course of therapy, appropriate local or systemic antibiotic therapy should be instituted.

**Supplied:** 0.25% and 1% in 7.5 Gm. and 30 Gm. tubes

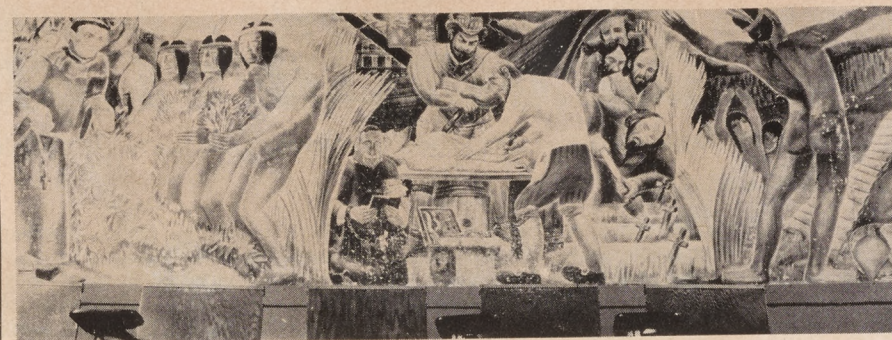
The four formulations are in a skin lipid base composed of saturated and unsaturated free fatty acids; triglycerol and other esters of fatty acids; saturated and unsaturated hydrocarbons; free cholesterol; high-molecular-weight alcohol; with water and aromatics.

†Reg. Trademark of Dow Chemical Company  
©1964, The Upjohn Company



# Guid

# tolog



## More About The Cover

**Toland Hall Frescoes**—The complete fresco (above), a portion (an episode from the career of Sir Francis Drake) of which is in full color on the cover, shows a young native California Indian reaching out in greeting to the sun. To the far left, three Indians illustrate the native California healing methods of the period. One is a warrior sucking his wound; the second, a medicine man mixing a poultice; and the third is digging for bulbs to make a remedy for snake bite. Completing this panel, are three Indians offering a padre the three most important herbs contributed by California to modern medicine: Yerba santa (*eriodictyon glutinosum*), cascara sagrada (*rhamnus purshiana*), and grindelia robusta.

**Bottom left (Duotone on cover)**—Fresco devoted to physicians of the Gold Rush period and early San Francisco. Extreme left, Dr. E. P. Jones—doctor, lawyer and newspaper publisher—for whom San Francisco's Jones street is named. To the right, Dr. J. Townsend hanging up his shingle announcing the first medical office in the city (1846). On to the right, Dr. V. J. Fourgeaud—next to his wife and son—holds the title page of a monograph on diphtheria which he wrote after the 1856 epidemic. Other scenes include: Dr. Hugh Toland (1806-80), founder of Toland Medical School, as he might have ridden in from the plains on a mustang to make his California fortune; Dr. Edward Willis shooting Dr. Hullings, his predecessor at Placerville, after Hullings had torn up Willis' diploma in a drunken rage.

**Middle Duotone**—This fresco deals with medicine in Southern California. Left, a Spanish soldier guards several mission Indians clustered around a shrine. The principal figure to the right is Don Pedro Prat, a surgeon of the Spanish expedition to California who is treating the leg of a patient. The remainder of the panel shows the American trapper James Ohio Pattle buying his freedom from a Mexican jail by vaccinating Californians against smallpox during 1828 epidemic.

**Extreme right panel**—From left, Peg-Leg Smith, a famous pioneer trapper and prospector, severs his leg after being wounded in Indian fight; center, Spanish surgeon Dr. Don Pablo Soler (about 1798) attends an Indian who has been gored by a bull. To the left of this group General Castro persuades famous Indian doctor, Petronio (1844), to cure a wounded code. At far right of the panel the leader of the expedition, Anza. To the left, a bewildered Indian between a padre who baptizes him and a soldier who offers him alcohol.

The ceiling space of Toland Hall Amphitheater was divided by artist Bernard Zakheim to create a logical juncture of the circular wall and ceiling beams. Each of the six panels formed by this division is 14½ feet wide by 4½ feet high. The room is designed on the principle of radiation from a central point and fresco composition repeats this radiation by movement from left to right of the center of the curved wall.

The artist planned his work to enrich the architectural characteristics, and maintained the walls as parting and not as decorative that break up the wall surface by illusory depth or projection. There is no perspective in the paintings and any forms which seem to have this characteristic are used deliberately to express direction in the composition.

Painted between 1935 and 1937, the entire work is to be considered as an interpretation rather than an illustration of this history of medicine in California, with a contrast of the artist's concept of good and evil to enhance the dramatic quality of the narrative.

The composition travels to the left and to the right of the center of the curved wall—a design of the rising sun—in the center behind the amphitheater's projection room—reflects the sunburst pattern of the ceiling and symbolizes the eastward direction. To the left of center is depicted the development of medicine in Northern California and, to the right, Southern California.

Causative Agent: Unknown

Diagnosis: Infantile Erythema

Treatment: Four days

with Medrol Acetate

prednisolone acetate

served to clear the skin

was an 11-month-old child

matosis dated from

months. Soothing

were used adjunctively

Photographs, courtesy of M. J. Jones

Before treatment:



After treatment:

Causative Agent: Poison

Diagnosis: Contact Dermatitis

Treatment: Seven days

treatment with

Neo-Medrol Acetate

Veriderm served

these acute contact

dermatitis lesions

to poison ivy.

Photographs, courtesy of M. J. Jones

Before treatment:



After treatment:



REMINISCENCES OF MY TRAINING FOR THE PRACTICE OF MEDICINE  
AT THE UNIVERSITY OF CALIFORNIA AND ITS MEDICAL SCHOOL FROM 1907 to 1915

By

Albert H. Rowe, M. S., M. D.







REMINISCENCES OF MY TRAINING FOR THE PRACTICE OF MEDICINE

AT THE UNIVERSITY OF CALIFORNIA AND ITS MEDICAL SCHOOL FROM 1907 TO 1915

Albert H. Rowe, M. S., M. D.

I am glad to write these reminiscences at the request of my admired and inspiring friend, Doctor W. E. Carter, particularly because it is done during the 50th anniversary of my graduation from the Medical School.

My decision to become a physician occurred at the end of my freshman year at the University of California in 1908, 56 years ago. The number of students entering the University in the previous year was around 450, being restricted in number because of the San Francisco earthquake in 1906. Though I had leanings toward medicine through high school because of its practice by my brother, Charles H. Rowe, 14 years my senior, who had graduated from Cooper Medical School in 1898, my father had advised against my being a physician because there was "room for only one doctor in the family". Therefore during my first year at the University I took preliminary work for the study of law. In 1908 however I switched over to the pre-medical course, largely through the encouragement of my brother physician.

During the next two years the lectures and laboratory work in the pre-medical course were given by Professors Torrey in Biology and Professor Kofoed in Zoology. Chemistry was taught by the stimulating and inspiring Doctor Morgan. The Physics laboratory and lectures were given by an unimaginative old professor. All of this with my continued study of German, English, French and Logic occupied all my time on the campus and required study in the evenings and most of the weekends. Those courses in my pre-medical, sophomore and junior years were held in the old chemistry building and also in the biology and zoological buildings and in old North and South Halls. During my junior year the library was moved from the



MEMORANDUM OF MY TRAINING FOR THE PRACTICE OF MEDICINE  
AT THE UNIVERSITY OF CALIFORNIA AND THE MEDICAL SCHOOL FROM 1907 TO 1915

Albert H. Rowe, M.D., M.P.

I am glad to write these reminiscences at the request of my admired and interesting friend, Doctor W. E. Carter, particularly because it is done during the anniversary of my graduation from the Medical School.

My decision to become a physician occurred at the end of my freshman year at the University of California in 1908, 26 years ago. The number of students entering the University in the previous year was around 450, being restricted in number because of the San Francisco earthquake in 1906. Through I had leaned toward medicine through high school because of the practice by my brother, Walter H. Rowe, 14 years my senior, who had graduated from Cooper Medical School in 1898, my father had advised against my being a physician because there was room for only one doctor in the family. Therefore during my first year at the University I took preliminary work for the study of law. In 1908 however I switched over to the pre-medical course, largely through the encouragement of another physician.

During the next two years the lectures and laboratory work in the pre-medical course were given by Professor Torrey in Biology and Professor Kirtland in Zoology. Anatomy was taught by the stimulating and inspiring Doctor Morgan. The Hygiene laboratory and lectures were given by an imaginative old professor. All of this with my continued study of German, English, French and Logic occupied all my time on the campus and required study in the evenings and most of the weekends.

The courses in my pre-medical, sophomore and junior years were held in the Chemistry building and also in the biology and zoological buildings and in North and South Halls. During my junior year the library was moved from the

old Ba  
Du  
myself  
which  
Sweet,  
Hoag,  
Do  
being  
he who  
number  
mounted  
those  
Morse  
fessor  
I e  
student  
Wisman  
Kerr wh  
Harvard  
General  
became  
Profess  
The  
end of  
Ruby Cu  
later b



old Bacon Hall to its present location.

During my junior year, looking forward to the study of medicine, I made myself acquainted with many of the students in the first two years of medicine, which were in those years, given on the Berkeley campus. These included Clifford Sweet, Oswald Robertson, Allison Kilgore, Dewey Powell, Ernest Cleary, Carl Hoag, Selby Marks, Charles Tranter, E. I. Ahler, Merton Long and others.

Doctor Rinehart in those years was the University Physician, the Infirmary being in an old wooden structure opposite the present Cowell Infirmary. It was he who gave the Hygiene course, during which students, four or five hundred in number sang songs, rang bells, blew horns and gave college yells until Rinehart mounted the platform in 101 California Hall, requiring immediate restraint. In those years we also had the great privilege and benefit of listening to Henry Morse Stevens in History and the renown Charles Mills Gailey who was the professor of English.

I entered the first year of the Medical School in 1910 with about 20 other students, a number of whom stopped during the end of the first year. Henry Wisman transferred to Johns Hopkins at the end of the second year as did Bill Kerr who began medicine in 1911 and at the end of his second year transferred to Harvard Medical School. After being an intern and resident at Massachusetts General and serving in the first World War he came back to San Francisco and became Doctor Moffitt's assistant. Later he assumed the important position of Professor of Medicine in our institution.

The students who entered the freshman class and graduated with me at the end of four years were Roy Abbott, George Pierce, Frank Baxter, Hugh Berkeley, Ruby Cunningham, Edna Locke, Dutch Ehlers, Fred Scatina and a Miss Davis, who later became a missionary in India. About  $2/3$  of our entire time during the



...to the present location.

During my junior year, looking forward to the study of medicine, I made  
 self acquainted with many of the students in the first two years of medicine,  
 who were in those years, given on the Berkeley campus. These included Clifford  
 ... , Oswald Robertson, Allison Kilgore, Betty Powell, Ernest Clancy, Carl  
 ... , Betty Barker, Charles Traylor, E. I. Miller, Norton Long and others.

Doctor Minshart in those years was the University Physician, the University  
 ... in an old wooden structure opposite the present Cowell Infirmary. It was  
 ... who gave the Hygiene course, during which students, four or five hundred in  
 ... sang songs, sang bells, blew horns and gave college yell until Minshart  
 ... the platform in 101 California Hall, regarding immediate treatment. In  
 ... years we also had the great privilege and benefit of listening to Henry  
 ... Stevens in History and the renowned Charles Mills Bailey who was the pro-  
 ... of English.

I entered the first year of the Medical School in 1910 with about 20 other  
 ... , a number of whom stopped during the end of the first year. Henry  
 ... transferred to Johns Hopkins at the end of the second year as did Bill  
 ... who began medicine in 1911 and at the end of his second year transferred to  
 ... Medical School. After being an intern and resident at Massachusetts  
 ... and serving in the first World War he came back to San Francisco and  
 ... Doctor Moffitt's assistant. Later he assumed the important position of  
 ... of medicine in our institution.

The students who entered the freshman class and graduated with me at the  
 ... of four years were Roy Abbott, George Placer, Frank Baxter, Hugh Berkeley,  
 ... Cunningham, Edna Locke, Dutch Elfers, Fred Scutten and a Miss Davis, who  
 ... became a laboratory in India. About 2/3 of our entire time during the

first  
 of the  
 devote  
 in the  
 from m  
 in the  
 a week  
 and an  
 Doctor  
 system  
 Harvey  
 cine a  
 own gr  
 Hil  
 first s  
 dissect  
 there w  
 odors o  
 hot day  
 Dur  
 Roberts  
 book wa  
 tion in  
 days of  
 and the  
 complic  
 of Doct



first year was devoted to the study of osteology and anatomy under the direction of the very strict and demanding Doctor Moody. During the first three months we devoted practically all of our time to osteology, learning to model all the bones in the body in clay. The final examination required modeling of one or two bones from memory during a two-hour period. Thereafter 1/2 of our entire year was spent in the dissection of a cadaver. Doctor Moody lectured to us two or three times a week, gave us examinations every six weeks, and a final examination on osteology and anatomy was given at the end of a year and a half. He was ably assisted by Doctor Richard Harvey, particularly in the study of the brain and central nervous system. Contrasting to the austere, critical and demanding Doctor Moody, Doctor Harvey was a refreshing and understanding instructor, who was also studying medicine along with us and graduated from our Medical School about two years after our own graduation.

Histology was taught by the well informed Doctor Long during part of the first semester. This together with anatomy was in a wooden building, the dissecting rooms being in a low-ceilinged upper floor with skylights, in which there was little ventilation and which were uncomfortable and filled with the odors of the cadavers and formalin which were especially oppressing during the hot days in the spring, summer and fall.

During the first year we also were instructed in bio-chemistry by T. Brailsford Robertson who had come to the University from Queens Land, Australia. The test book was by Aberhalden of Germany which presented the limited, existent information in a verbose manner which was confusing, at least to me. During those days of course none of the modern micro-tests on blood and urine were available and the determination of a blood sugar required large amounts of blood and a complicated technique. The gracious and older, Doctor Maxwell, with the assistance of Doctor Burnett conducted the laboratory and lectured on physiology in the



that year was devoted to the study of osteology and anatomy under the direction of the very strict and demanding Doctor Moody. During the first three months we devoted practically all of our time to osteology, learning to model all the bones of the body in clay. The final examination required modeling of one or two bones from memory during a two-hour period. Thereafter 1/2 of our entire year was spent in the dissection of a cadaver. Doctor Moody lectured to us two or three times a week, gave us examinations every six weeks, and a final examination in osteology and anatomy was given at the end of a year and a half. He was ably assisted by other Richard Harvey, particularly in the study of the brain and central nervous system. Contrasting to the austere, critical and demanding Doctor Moody, Doctor Harvey was a refreshing and understanding instructor, who was also studying medicine along with us and graduated from our Medical School about two years after our graduation.

Histology was taught by the well informed Doctor Long during part of the first semester. This together with anatomy was in a wooden building, the dissecting room being in a low-ceilinged upper floor with skylights, in which there was little ventilation and which were uncomfortable and filled with the stench of the cadavers and formalin which were especially oppressive during the days in the spring, summer and fall.

During the first year we also were instructed in bio-chemistry by T. B. Wellford Watson who had come to the University from Queens Land, Australia. The text was by Abernethy of Germany which presented the limited, existent information in a verbose manner which was confusing, at least to me. During those days of course none of the modern micro-tests on blood and urine were available and the determination of a blood sugar required large amounts of blood and a complicated technique. The gross and other, Doctor Maxwell, with the assistance of Doctor Burnett conducted the laboratory and lectured on physiology in the



same building. This was an old, shingled building above the Faculty Club. The lecture room and laboratory in which we studied bacteriology were in a two-story building two hundred feet away from the bio-chemistry building and in this building the State Board of Health was also situated. Doctor Gay was the very able Professor of Bacteriology. He had been an assistant professor at Columbia Medical School and had studied at the Pasteur Institute. He lectured to us in a most instructive manner on bacteriology and immunology and interestingly from my present viewpoint, on anaphylaxis and allergy, demonstrating anaphylaxis in guinea pigs in both the lungs and the gastrointestinal tract. Doctor Fitzgerald, recently from Toronto, Miss Beattie and Doctor Geiger from Tulane assisted Doctor Gay. Geiger also worked in the State Board of Health. Our course in pathology was given by Doctor Granville Rusk and two very able student associates. The text book was by Adami of Montreal. Rusk demonstrated human pathology during his lectures which were given from 1:00 to 2:00 P.M. during which there was a marked tendency for a number of us to become drowsy and even fall asleep. Our few autopsies were done in the small ancient morgue at the Alameda County Hospital ten miles away. Compared with the instruction and actual autopsy studies today this course in pathology was very inadequate.

During my sophomore year I became interested in the importance of research in the study of physiological and bacteriological problems. Doctor Maxwell encouraged this interest and suggested that I study the possible effect of para-thyroid hormone on creatinine. This required several visits to the slaughter house in West Berkeley in order to obtain considerable amounts of para-thyroid tissue from the thyroids of sheep. The results of the study were published in my first medical article in the Journal of Physiology in 1912. After its completion Doctor Maxwell recommended me to the Honor Society of Sigma Xi.



the building. This was an old, shingled building above the Faculty Club. The  
 nature room and laboratory in which we studied bacteriology were in a two-story  
 building two hundred feet away from the bio-chemistry building and in this build-  
 ing the State Board of Health was also situated. Doctor Gay was the very able  
 chairman of Bacteriology. He had been an assistant professor at Columbia  
 Medical School and had studied at the Pasteur Institute. He lectured to us  
 in a most instructive manner on bacteriology and immunology and interestingly  
 on my present viewpoint, on anaphylaxis and allergy, demonstrating anaphylaxis  
 in guinea pigs in both the lungs and the gastrointestinal tract. Doctor Fitzpatrick,  
 formerly from Toronto, Miss Beattie and Doctor Geiger from Tulane assisted  
 Doctor Gay. Geiger also worked in the State Board of Health. Our course in  
 pathology was given by Doctor Grenville Husk and two very able student associates.  
 A text book was by Adams of Montreal. Husk demonstrated human pathology dur-  
 ing his lectures which were given from 1:00 to 2:00 P.M. during which there was  
 a marked tendency for a number of us to become drowsy and even fall asleep.  
 A few autopsies were done in the small anatomical morgue at the Alameda County  
 Hospital ten miles away. Compared with the instruction and actual autopsy studies  
 by this course in pathology was very inadequate.  
 During my sophomore year I became interested in the importance of research  
 in the study of physiological and pathological problems. Doctor Maxwell en-  
 couraged this interest and suggested that I study the possible effect of para-  
 thyroid hormone on cretinism. This required several visits to the slaughter-  
 house in West Berkeley in order to obtain considerable amounts of para-thyroid  
 tissue from the thyroids of sheep. The results of the study were published in  
 the first medical article in the Journal of Physiology in 1912. After the com-  
 munication Doctor Maxwell recommended me to the Honor Society of Sigma Xi.

Dr  
 labora  
 Medical  
 and  
 the  
 the  
 the  
 were  
 and  
 having  
 Francis  
 On  
 member  
 was  
 and  
 hospi  
 anthro  
 to de  
 me  
 and  
 ular  
 ually  
 ward  
 our  
 Th  
 his



During the summer of 1912 I continued such work in Doctor Gay's bacteriological laboratory and early in September as I was ready to enter my junior year in the Medical School in San Francisco increasing fever and gastrointestinal symptoms and later a positive Widal test indicated that I had typhoid, contracted in the laboratory. Fever up to 105 continued for about three weeks. In those days the diet was limited to pea soup, milk and eggs and a little fruit juice with the entire exclusion of meats, starches, vegetables and bakery products. There were no serious complications and the fever finally subsided in the fourth week and in another two weeks even though I had lost 30 pounds down to 130 pounds having a height of 6 ft. 2 inches, I reported at the Medical School in San Francisco four weeks after the other students had begun the semester.

On the morning I returned to San Francisco to continue my studies with the members of our junior class, I was interviewed by Doctor Herbert Moffitt, who was the Professor Medicine and the new Dean of the school. The medical school and hospital at that time was the central building of the so-called affiliated hospital colleges on Parnassus Avenue. The one to the west was devoted to anthropology, the central one to medicine and the one to the east was devoted to dentistry and pharmacology. Doctor Moffitt took me into his office, telling me he knew of my illness. He asked for my assurance that I was regaining strength and some weight after my typhoid fever. He gave me a physical examination, particularly my abdomen and especially my spleen. Thereafter he approved of my gradually resuming work in the junior class. I was soon attending the lectures and ward rounds, and working in the clinics, the latter being in the basement of our medical building.

This initial conference with Doctor Herbert C. Moffitt impressed me with his dignified, dynamic personality, and as I continued to listen to his dis-



During the summer of 1912 I continued such work in Doctor Gay's bacteriological laboratory and early in September as I was ready to enter my junior year in the Medical School in San Francisco increasing fever and gastrointestinal symptoms and later a positive Widal test indicated that I had typhoid, contracted in the laboratory. Fever up to 105 continued for about three weeks. In those days diet was limited to pea soup, milk and eggs and a little fruit juice with an entire exclusion of meats, starches, vegetables and bakery products. There were no nervous complications and the fever finally subsided in the fourth week and in another two weeks even though I had lost 30 pounds down to 130 pounds I was a height of 5 ft. 2 inches, I reported at the Medical School in San Francisco four weeks after the other students had begun the semester.

In the morning I returned to San Francisco to continue my studies with the others of our junior class. I was interviewed by Doctor Herbert Moffitt, who was the Professor of Medicine and the new Dean of the school. The medical school at that time was the central building of the so-called affiliated hospital colleges on Parnassus Avenue. The one to the west was devoted to anthropology, the central one to medicine and the one to the east was devoted to dentistry and pharmacology. Doctor Moffitt took me into his office, telling me how of my illness. He asked for my assurance that I was regaining strength and some weight after my typhoid fever. He gave me a physical examination, particularly my abdomen and especially my spleen. Thereafter he approved of my gradually resuming work in the junior class. I was soon attending the lectures and rounds, and working in the clinics, the latter being in the basement of the medical building.

This initial conference with Doctor Herbert C. Moffitt impressed me with a dignified, dynamic personality, and as I continued to listen to his dis-



cussions of available knowledge in internal medicine in our amphitheater on the third floor and at the bedsides of patients in the men's and women's wards on the second floor of the hospital, my admiration and respect steadily increased, creating an immediate desire to emulate him in the effort and devotion to his many responsibilities and deciding me, even then, to specialize in internal medicine. My high regard for Doctor Moffitt steadily increased during the following two years as a student and during the year as his first full year intern in internal medicine. I increasingly realized his entire devotion to his teaching, to his study and treatment of free and private patients, his broad acquaintance with the medical literature, in English, German and French, his interest in the history of medicine which he transmitted to us as students and his encouragement of all of us in the study and investigation of special phases of his specialty. Further discussion of his influence on all students and in activities in our school will be discussed later in this contribution.

Students in the junior and senior years of medical school at that time lived in boarding houses two and three blocks from the school itself. I lived at Mrs. Case's on Carl Street along with Hugh Berkeley and Ned Bull. Our scanty meals were served in a low-ceilinged dining room in the basement. Without milk, cookies, candy and cake in our rooms, our nutrition would have suffered. Several other students at the medical school who roomed in adjacent houses also were boarders. In my senior year Fritz Kruse and Homer Woolsey of the junior class roomed with me at Mrs. Case's.

At the Medical School the classes started at 8:00 o'clock and continued throughout the day. Doctor Herbert Moffitt was in the school every morning from 8 until 12, after which he visited patients in different hospitals, consulted with private physicians and conducted his private practice in the Schroth building on Stockton Street on Union Square. Doctor Moffitt's chief associate in teaching and in his private office was Doctor Hervert Allen, his brother-in-law. He was a



possessions of available knowledge in internal medicine in our amphitheater on the third floor and at the bedside of patients in the men's and women's wards on the second floor of the hospital, my education and respect steadily increased, creating an immediate desire to emulate him in the effort and devotion to his responsibilities and deciding me, even then, to specialize in internal medicine. My high regard for Doctor Moffitt steadily increased during the following two years as a student and during the year as his first full year intern in internal medicine. I increasingly realized his entire devotion to his teaching, to his study and treatment of free and private patients, his broad acquaintance with the medical literature, in English, German and French, his interest in the history of medicine which he transmitted to us as students and his encouragement of all of us in the study and investigation of special phases of his specialty. Further discussion of his influence on all students and his activities in our school will be discussed later in this contribution.

Students in the junior and senior years of medical school at that time lived in boarding houses two and three blocks from the school itself. I lived at 1111 Case's on Carl Street along with Hugh Berkeley and Ned Bull. Our assembly hall were served in a low-ceilinged dining room in the basement. Without milk, cookies, candy and cake in our room, our nutrition would have suffered. Several other students at the medical school who roomed in adjacent houses also were workers. In my senior year Fritz Kraus and Homer Woolsey of the junior class roomed with me at Mrs. Case's.

At the Medical School the classes started at 8:00 o'clock and continued throughout the day. Doctor Herbert Moffitt was in the school every morning from 12, after which he visited patients in different hospitals, consulted private physicians and conducted his private practice in the Belmont building at 1300 Madison Street on Union Square. Doctor Moffitt's chief associate in teaching in his private office was Doctor Herbert Allen, his brother-in-law. He was a



graduate of Johns Hopkins. He had also been a resident in the Western Reserve Medical School in Cleveland. Doctor Allen assisted Doctor Moffitt in our study and treatment of ward patients. My appreciation of his help and guidance led to dedication of my book "Elimination Diets and the Patient's Allergies" to him in 1942. Doctor Leroy Briggs who first practiced in Oakland and later moved to San Francisco instructed us in our clinical laboratory tests in a 10 x 14 room. He also did laboratory work in Doctor Moffitt's private office in the afternoons and later he became Professor of Medicine and an important consultant in San Francisco.

In addition, Doctor Eugene Kilgore and Doctor Whitney assisted Doctor Moffitt in teaching and particularly in the study and treatment of patients in the small medical clinic in the basement of the school.

Doctor Wallace Terry was the Professor of Surgery and was assisted by Doctor Sterling Bunnell, both in the Medical School and in his private practice. Doctor Terry was in great demand in those years, operating in the single operating room at the Medical School and lecturing to the students and conducting bedside instruction in the wards of the school. He was one of the eminent surgeons operating in several of the other hospitals in San Francisco and in great demand as a consultant in surgery. In this work he was assisted by Doctor Bunnell and also by Doctor Carl Hoag who at that time was the surgical resident in the hospital. Doctor Hoag later became Doctor Terry's associate in private practice and later an important Associate Professor and specialist in surgery in the city.

In the Surgical Clinic, Doctor Saxton Pope, who had given up a private practice in Watsonville was in charge. Doctor Pope also became interested in Ishi who had been brought to the anthropology building adjoining our Medical School from the Feather River country where he had been found as the lone survivor of an Indian tribe. Doctor Pope encouraged Ishi to make bows and arrows such as he had used in his aboriginal life and practiced archer with Ishi in the



graduate of Johns Hopkins. He had also been a resident in the Western Reserve Medical School in Cleveland. Doctor Allen assisted Doctor Moffitt in our study and treatment of ward patients. My appreciation of his help and guidance led to dedication of my book "Elimination Diet and the Patient's Allergies" to him in 1922. Doctor Harvey Briggs who first practiced in Oakland and later moved to San Francisco transferred us in our clinical laboratory tests in a 10 x 14 room. He also did laboratory work in Doctor Moffitt's private office in the afternoon and later he became Professor of Medicine and an important consultant in San Francisco.

In addition, Doctor Eugene Kilgus and Doctor Whitney assisted Doctor Moffitt in teaching and particularly in the study and treatment of patients in the small medical clinic in the basement of the school. Doctor Wallace Terry was the Professor of Surgery and was assisted by Doctor Sterling Bunnell, both in the Medical School and in his private practice. Doctor Terry was in great demand in those years, operating in the single operating room at the Medical School and lecturing to the students and conducting bedside instruction in the wards of the school. He was one of the eminent surgeons operating in several of the other hospitals in San Francisco and in great demand as a consultant in surgery. In this work he was assisted by Doctor Bunnell and also by Doctor Carl Hoag who at that time was the surgical resident in the hospital. Doctor Hoag later became Doctor Terry's associate in private office and later an important Associate Professor and specialist in surgery in the city.

In the Surgical Clinic, Doctor Saxton Pope, who had given up a private practice in San Francisco, was in charge. Doctor Pope also became interested in Laid who had been brought to the anthropology building adjoining our Medical School in the Feather River country where he had been found as the lone survivor of an Indian tribe. Doctor Pope encouraged Laid to make bows and arrows such as he had used in his sporting life and practiced archery with Laid in the



field adjoining the Medical School. Doctor Pope later hunted wild game with bows and arrows and published his experiences in an interesting volume. Ishi gradually learned a few English words. He adapted himself quite well to the life about the school. Unfortunately he developed tuberculosis and as a patient in the hospital was assigned to me for observation and supervision.

The operating in the hospital was done in a single room on the north side of the second floor of the building. It was most primitive and lacking in many of the precautions for the prevention of infection which are required in our modern hospitals. In fact, surgeons and gynecologists who had operated in the school up to two years before, in some cases did not use any gloves and did not change their clothes or shoes, only wearing an apron during their operations. The hands of course had been carefully scrubbed and washed with soap and antiseptic solutions before such surgery.

Two mornings each week members of our class walked out the road to La Honda County Hospital or rode the streetcar to the top of the hill two blocks from the hospital. There we listened to William W. Kerr, whom we called "Daddy Kerr" who was a graduate of the Medical School of Edinburgh. He gave us lectures in a text book routine on medical diseases and their treatment. His associate, Doctor George Ebright substituted on some mornings and he remained in the wards helping us in taking histories and learning how to do physical examinations on the men and women patients. Lectures were at the end of the men's ward in which there were 40 beds and an all-prevailing odor of sick patients, medicines, foods and tobacco.

During the junior year moreover we had bedside instruction in the diagnosis and treatment of diseases of the brain and spinal cord by Doctor Howard Naffziger who had just returned from study and training with Doctor Harvey Cushing at Johns Hopkins. The instruction which we had received from Doctor



After joining the Medical School, Doctor Pope later hunted with game with  
 and wrote and published his experiences in an interesting volume. I had  
 actually learned a few English words. He adapted himself quite well to the  
 life about the school. Unfortunately he developed tuberculosis and as a patient  
 in the hospital was assigned to me for observation and supervision.  
 The operating in the hospital was done in a single room on the north side  
 of the second floor of the building. It was most primitive and lacking in  
 any of the precautions for the prevention of infection which are required in  
 modern hospitals. In fact, surgeons and gynecologists who had operated  
 in the school up to two years before, in some cases did not use any gloves and  
 did not change their clothes or shoes, only wearing an apron during their  
 operations. The hands of course had been carefully scrubbed and washed with  
 soap and antiseptic solutions before each surgery.  
 Two mornings each week workers of our class walked out the road to La Honda  
 and Hospital or rode the streetcar to the top of the hill two blocks from  
 the hospital. There we listened to William W. Hunt, whom we called "Daddy Hunt".  
 He was a graduate of the Medical School of Edinburgh. He gave us lectures in  
 text book routine on medical diseases and their treatment. His associate,  
 Dr. George Wright substituted on some mornings and he remained in the wards  
 helping me in taking histories and learning how to do physical examinations on  
 men and women patients. Lectures were at the end of the run's ward in which  
 there were 40 beds and an all-pervading odor of sick patients, medicines, foods  
 and tobacco.  
 During the junior year moreover we had bedside instruction in the diagnosis  
 and treatment of diseases of the brain and spinal cord by Doctor Howard  
 Dwight who had just returned from study and training with Doctor Harvey  
 Cushing at Johns Hopkins. The instruction which we had received from Doctor

Richard  
 tained  
 of gro  
 by Do  
 name  
 gynec  
 to us  
 festat  
 and at  
 year L  
 was gi  
 the re  
 to be  
 Assist  
 Doctor  
 the ma  
 Of cou  
 D  
 Slemmo  
 at Jon  
 ed. Ha  
 50 min  
 in a ho  
 us a gr  
 Radot,  
 been a



Richard Harvey in our sophomore year and our knowledge of the nervous system obtained from Bing's book on the subject as recommended to us by Doctor Harvey was of great help in our comprehension of the information given by Naffziger.

In the Medical School on Parnassus Avenue mental diseases were discussed by Doctor Milton Lennen and by a psychiatrist from the Livermore Sanitarium whose name escapes my memory. Doctor Billy Moore gave lectures and demonstrations on gynecology. Doctor Howard Morrow was in full charge of dermatology, lecturing to us on occasions and conducting the Clinic in which the extremely common manifestations of syphilis were a common problem. At that time mercury by inunction and at times intramuscularly was given to all of these patients. In my senior year I assisted in the administration of the first dose of Salvarsan or 606 which was given in the hospital. This was with considerable enthusiasm because of the reports of remarkable cures from the few doses which soon afterwards proved to be erroneous. Working with Doctor Morrow was Doctor Schmidt who later became Assistant Dean of the School. He did the first Wassermann tests in San Francisco. Doctor Morrow also took us to the old County Hospital on Portero Avenue to see the manifestations of leprosy in about 12 patients. He had no fear of the disease. Of course at that time there was no treatment which was at all helpful or curative.

During my senior year important additions to the faculty were made. Doctor Slemmons who had been in Associate Professor of Obstetrics with Doctor Williams at Johns Hopkins took charge of that department. His lectures were very detailed. He was insistent on strict attention and usually had us stand during his 50 minute presentations of the subject, much to our discomforture and usually in a hot room on the third floor. He was a devoted physician however and did us a great service in advising us to read "Pasteur's Life" by Pasteur Vallery Radot, whose grandson is the present leading allergist in France and who has been a friend of mine for over 20 years.



Edward Harvey in our sophomore year and our knowledge of the nervous system ob-  
 tained from King's book on the subject as recommended to us by Doctor Harvey was  
 a great help in our comprehension of the information given by Goldberger.  
 In the Medical School on Park Avenue mental diseases were discussed  
 by Doctor Milton Lerman and by a psychiatrist from the Livermore Sanatorium whose  
 analyses by memory. Doctor Billy Moore gave lectures and demonstrations on  
 psychology. Doctor Howard Morrow was in full charge of dermatology, lecturing  
 on occasion and conducting the Clinic in which the extremely common mani-  
 festations of syphilis were a common problem. At that time memory by inspection  
 at times intrinsically was given to all of these patients. In my senior  
 year I assisted in the administration of the first dose of Salvarsan or 606 which  
 was given in the hospital. This was with considerable enthusiasm because of  
 reports of remarkable cures from the few doses which soon afterwards proved  
 to be erroneous. Working with Doctor Morrow was Doctor Schmidt who later became  
 Assistant Dean of the School. He did the first Wassermann tests in San Francisco.  
 Doctor Morrow also took us to the old County Hospital on Portero Avenue to see  
 manifestations of leprosy in about 15 patients. He had no fear of the disease.  
 Because at that time there was no treatment which was at all helpful or curative.  
 During my senior year important additions to the faculty were made. Doctor  
 Johnson who had been an Associate Professor of Obstetrics with Doctor William  
 Johns Hopkins took charge of that department. His lectures were very detail-  
 ed. He was insistent on strict attention and usually had us stand during his  
 minute presentations of the subject, much to our discomfort and usually  
 in a hot room on the third floor. He was a devoted physician however and did  
 a great service in advising us to read "Fertile Life" by Professor Vallery  
 Rieu, whose grandson is the present leading allergist in France and who has  
 a friend of mine for over 20 years.



During our senior year we were required to deliver five women either in the hospital or in the home with the assistance of a nurse, "Red Scovel". The delivery room in the hospital was very inadequate, located in the back of the south wing of the second floor of the school. As I remember, three or four of the women after being draped and ready for delivery at the school and on two occasions on the kitchen tables in the homes insisted on descending to the floor on which we managed to place a supposedly sterile sheet. With such training of this type it is fortunate that I never even aided in the delivery of another baby. Doctor Slemmons did insist on our mastery of Williams' text book on obstetrics, giving us examinations on three or four occasions.

Of additional interest was the limited instruction we obtained in diseases of the eye by Doctor Franklin and Doctor Alexander and of the nose and sinuses by Doctor Albert Houston and his associated. In my final examination of the eye Doctor Alexander asked me to describe the findings in the left eye of a patient which I gradually found was false!

During my junior year, x-rays were done on the first floor by one of Doctor Morrow's assistants with a most inferior apparatus. I remember the morning Doctor Howard Ruggles who recently was trained by Doctor Holmes at the Massachusetts General in Boston met Doctor Moffitt on the second floor of the Medical School and decided on a limited area on that floor in which x-ray equipment and a dark room were to be installed. Thereafter Doctor Ruggles and his associate, Doctor Bryan did an increasing amount of x-ray in this very limited area with equipment which was then available and which was far inferior to today's perfected installations.

In addition, in my senior year Doctor Pratt and Doctor Thompson trained in surgery in Johns Hopkins came to the Medical School as assistants of Doctor Terry.



During our senior year we were required to deliver five women either in the hospital or in the home with the assistance of a nurse, "Red Geoviel". The delivery room in the hospital was very inadequate, located in the back of the building of the second floor of the school. As I remember, three or four women after being draped and ready for delivery at the school and on occasions on the kitchen tables in the home insisted on descending to the room in which we managed to place a supposedly sterile sheet. With such training of this type it is fortunate that I never even aided in the delivery of a baby. Doctor Blawie did limit on my mastery of Williams' text on obstetrics, giving us examinations on three or four occasions. Of additional interest was the limited instruction we obtained in diseases of the eye by Doctor Franklin and Doctor Alexander and of the nose and sinuses by Doctor Albert Houston and his associates. In my final examination of the eye Doctor Alexander asked me to describe the findings in the left eye of a patient which I gradually found was false. During my junior year, x-rays were done on the first floor by one of Doctor Brown's assistants with a most inferior apparatus. I remember the morning when Howard Hughes who recently was trained by Doctor Holmes at the Massachusetts General in Boston met Doctor Miller on the second floor of the Medical School. We decided on a limited area on that floor in which x-ray equipment and a dark room were to be installed. Thereafter Doctor Hughes and his associates, Doctor Miller and an increasing amount of x-ray in this very limited area with equipment that was then available and which was far inferior to today's perfected installations. In addition, in my senior year Doctor Pratt and Doctor Thompson trained in the Johns Hopkins came to the Medical School as assistants of Doctor Terry.



These two men had had excellent training with Halstead at Johns Hopkins and operated and treated surgical cases in our wards and also in the surgical clinic in the basement. In the women's ward at that time there were surgical, gynecological, obstetrical and medical patients in about 24 beds.

During our senior year for the first time there was a Doctor Libby who was the first resident in obstetrics under Doctor Slemmons. During our intern year several of the interns informed him that there was a patient in labor in the ward behind screens which had been placed around the examining table in one corner of the ward. After putting on his gloves and gown he examined the patient's rounded abdomen but when he pulled back the drape he was chagrined and disturbed when he found that the patient was a man with an obese abdomen! Reprimands of the amused culprits by Doctor Slemmons of course occurred!

In those years, orthopedics which had first been practiced as a specialty by Doctor Sherman and later by Doctor Hunkin who was active in our junior and senior years received little emphasis compared with that devoted to it in our modern schools. In addition, Doctor Willard was in charge of urological problems and he gave us a few lectures at the school and was one of the leading consultants in urology in the hospitals in the city, conducting a private practice down town.

During our senior year moreover, William Palmer Lucas assumed the Professorship of Children's Diseases in the Medical School. He was a well trained pediatrician, having received his training and having taught in one of the large New York medical hospitals and schools. He brought with him important information and knowledge about the diseases and treatment of infants and children and the then prevalent ideas about infant feeding. He had a small ward for children on the third floor of the hospital which opened on to a hallway along which there were several small private rooms in which patients, particularly of Doctor Moffitt's



Two men had had excellent training with Peabody at Johns Hopkins and  
 treated and treated surgical cases in our wards and also in the surgical  
 clinic in the basement. In the women's ward at that time there were surgical,  
 gynecological, obstetrical and medical patients in about 24 beds.  
 During our senior year for the first time there was a Doctor Libby who was  
 a first resident in obstetrics under Doctor Blumensaat. During our junior year  
 one of the interns informed him that there was a patient in labor in the  
 and called someone which had been placed around the examining table in one corner  
 of the ward. After putting on his gloves and gown he examined the patient's  
 and called someone but when he pulled back the drape he was shocked and disturbed  
 and he found that the patient was a man with an obese abdomen. He reminded of  
 a man I had seen by Doctor Blumensaat of course occurred.  
 In those years, orthopedics which had first been practiced as a specialty  
 by Doctor Sherman and later by Doctor Hunkin who was active in our junior and  
 senior years received little emphasis compared with that devoted to it in our  
 own schools. In addition, Doctor Willard was in charge of urological problems  
 and gave us a few lectures at the school and was one of the leading consultants  
 in the hospital in the city, conducting a private practice down  
 during our senior year moreover, William Palmer Lucas assumed the Professor-  
 ship of Children's Diseases in the Medical School. He was a well trained ped-  
 iatrist, having received his training and having taught in one of the large  
 New York medical hospitals and schools. He brought with him important information  
 and knowledge about the diseases and treatment of infants and children and the  
 prevalent ideas about infant feeding. He had a small ward for children  
 on the third floor of the hospital which opened on to a hallway along which there  
 were several small private rooms in which patients, particularly of Doctor Moffitt's



were present.

During our senior year, gradually through the efforts of Doctor Herbert Moffitt, plans for a new University Hospital on Parnassus Avenue were finished and money from private sources up to several hundred thousand dollars was collected. It was with the knowledge of this new hospital which was finally completed in 1916 that these men from Johns Hopkins and also Doctor Lucas joined the medical faculty. Until the hospital was opened the activity of these men was definitely handicapped.

During our student and intern years available knowledge about the causes and treatment in internal medicine and in fact in all of the other specialties was tremendously limited. Diabetes in children and young adults was usually fatal. Hyperthyroidism was an extremely serious problem and the use of iodine and x-ray which became available in the next few years was absent. Grouped transfusions were not available in California, making pernicious anemia practically always a fatal disease. The treatment of peptic ulcer advised by Sippy of Chicago a few years later was not known and there was no information about causes or treatment of cirrhosis of the liver, nephritis or hypertension. Medicine and in fact surgery was still being practiced based on the clinical experience of physicians recorded during the previous 30 years and active research and progress was based nearly entirely on the important discoveries in bacteriology during the previous three decades.

During our senior year each student was allowed to spend extra effort in the wards and in reading medical journals under the direction of one of the professors. Unhesitatingly I asked for such an opportunity with Doctor Moffitt. Along with three others in the class who reported on special clinical assignments on the literature we read in the Lane Library, since our own library had



...present. ...  
 During our senior year, gradually through the efforts of Doctor Herbert  
 ...place for a new University Hospital on Lawrence Avenue were finished  
 ...money from private sources up to several hundred thousand dollars was  
 ...It was with the knowledge of this new hospital which was finally  
 ...in 1916 that these men from Johns Hopkins and also Doctor Lucas  
 ...the medical faculty. Until the hospital was opened the activity of  
 ...was definitely handicapped.  
 During our student and intern years available knowledge about the causes  
 ...treatment in internal medicine and in fact in all of the other specialties  
 ...treatment was usually  
 ...Hypertension was an extremely serious problem and the use of iodine  
 ...x-ray which became available in the next few years was absent. Grouped trans-  
 ...were not available in California, asking pernicious anemia practically  
 ...the treatment of peptic ulcer advised by Sippy of  
 ...a few years later was not known and there was no information about causes  
 ...treatment of cirrhosis of the liver, nephritis or hypertension. Medicine  
 ...in fact surgery was still being practiced based on the clinical experience  
 ...physicians recorded during the previous 30 years and active research and  
 ...was based nearly entirely on the important discoveries in bacteriology  
 ...the previous three decades.  
 During our senior year each student was allowed to spend extra effort in  
 ...and in reading medical journals under the direction of one of the  
 ...Unhappily I asked for such an opportunity with Doctor Elliott.  
 ...with three others in the class who reported on special clinical assign-  
 ...on the literature we read in the law library, since our own library had



not been established at that time. Doctor Moffitt was especially interested in pernicious anemia, writing on it and transferring this interest to us. At that time transfusions were rare since blood grouping was not possible. Splenectomy was being advised in the literature because of which Doctor Terry did the initial one in the hospital which ended fatally from hemorrhage. Doctor Moffitt assigned liver regeneration to me, necessitating my study of German articles and watching the regeneration of liver in rabbits which I myself operated on in the Hooper Foundation.

The Hooper Foundation was directed by Doctor Whipple, a former Associate Professor of Pathology under Doctor Welch in Johns Hopkins. It was in the Hooper that Whipple's interest in blood regeneration developed, leading to his discovery that it was stimulated especially by liver and interestingly to an extent by apricots. This with his later important investigations gave him the Nobel prize shared by Doctor George Minot of the MGH, in honor of the information which resulted in the present control of pernicious anemia. Studying parasitical diseases in the Hooper was a fine gentleman by the name of Doctor Walker.

In the late spring of our senior year we applied for internships in our Medical School. For the first time full year's services in internal medicine, surgery, obstetrics and pediatrics were offered. Half-year services in two of the specialties also were available. Fortunately I was given the first full year's service in internal medicine with Doctor Moffitt. Doctor Baxter was given six months in medicine and six months in surgery. Doctor Abbott had a six months' internship in medicine and six months in obstetrics. The other members of our class, graduating in 1914 had other assignments, the division of which I do not recall.

As interns, we lived in small rooms in the rear of the medical school



had been established at that time. Doctor McElroy was especially interested in pernicious anemia, writing on it and presenting this interest to us. At that time transfusions were rare since blood grouping was not possible. Transfusion was being advised in the literature because of which Doctor Terry at the initial one to the hospital which ended, finally from hemorrhage. Doctor McElroy assigned liver regeneration to me, necessitating my study of German articles and watching the regeneration of liver in rabbits which I myself operated on in the Hooper Foundation.

The Hooper Foundation was directed by Doctor Whipple, a former associate professor of Pathology under Doctor Nelson in Johns Hopkins. It was in the Hooper that Whipple's interest in blood regeneration developed, leading to his discovery that it was stimulated especially by liver and interestingly to an extent by spleen. This with his later important investigations gave him the Nobel prize shared by Doctor George Minot of the M.H. in honor of the investigation which resulted in the present control of pernicious anemia. Studying metastatic diseases in the Hooper was a fine privilege by the name of Doctor

In the late spring of our senior year we applied for internships in our Medical School. For the first time full year's services in internal medicine, surgery, obstetrics and pediatrics were offered. Half-year services in two of the specialties also were available. Fortunately I was given the first full year's service in internal medicine with Doctor McElroy. Doctor Baxter was then six months in medicine and six months in surgery. Doctor Abbott had a six months' internship in medicine and six months in obstetrics. The other members of our class, graduating in 1914 had other assignments, the division which I do not recall. As interns, we lived in small rooms in the rear of the medical school



building, ate in a dining room on the 2nd floor and were paid \$10.00 a month. None was married except Edna Locke.

As the Chief Intern of Doctor Moffitt's I was expected to meet him at the entrance of the hospital at 8 A.M. and to inform him about new cases on the wards and give other information he had previously requested. After putting on his long coat he rapidly went to the wards and on specified mornings to his lectures and case demonstrations in the amphitheater. During these lectures and ward rounds I and the other interns and specified students in the senior class had the responsibility to summarize the histories and discuss the physical findings of patients, all of which subsequently were reviewed critically by Doctor Moffitt and often by Doctor Allen who was usually in the group. We, as interns, were expected to have recorded all of the histories and physical findings together with blood and urinalysis done by ourselves for Doctor Moffitt's information. No central laboratory existed. Summaries of discussions of the previous day of other tests had to be recorded in the records. I remember when such information had not been completed on four new patients I offered as an excuse that I had worked steadily from 2 in the afternoon until midnight, to which Doctor Moffitt responded "That is a very poor excuse. Work never hurts anybody". Fritz Kruse followed me as Doctor Moffitt's full year intern. He later was a resident at Johns Hopkins then being an associate in Doctor Moffitt's private practice and later practicing internal medicine for many years.

This training, continued inspiration and instruction from Doctor Moffitt during my junior and senior years and especially as his intern thereafter was the outstanding privilege in my formative training. The example he transmitted of interest and concern in his patients, his effort to find the causes and the best treatment available in those years, his emphasis on the importance of reading current literature in English and also in French and German and his



...in a dining room on the 2nd floor and were paid \$10.00 a month.  
 ...was varied except from books.  
 At the Chief Index of Doctor Moffitt's I was expected to meet him at the  
 entrance of the hospital at 8 A.M. and to inform him about new cases on the  
 wards and give other information he had previously requested. After putting  
 his long coat he rapidly went to the wards and on specified mornings to his  
 lecture and case demonstrations in the amphitheater. During these lectures  
 and rounds I and the other interns and specified students in the senior  
 class had the responsibility to summarize the histories and discuss the physical  
 findings of patients, all of which subsequently were reviewed critically by  
 Doctor Moffitt and often by Doctor Allen who was usually in the group. We, as  
 interns, were expected to have recorded all of the histories and physical find-  
 ings together with blood and urinalysis done by ourselves for Doctor Moffitt's  
 attention. No central laboratory existed. Summaries of diagnosis of the  
 previous day of other years had to be recorded in the records. I remember when  
 this information had not been completed on four new patients I offered an ap-  
 pointment that I had worked steadily from 2 in the afternoon until midnight, to  
 which Doctor Moffitt responded "that is a very poor excuse. Work never hurts."  
 Dr. Allen followed me as Doctor Moffitt's full year intern. He  
 was a resident at Johns Hopkins then being an associate in Doctor Moffitt's  
 clinic practice and later practicing internal medicine for many years.  
 This training, continued instruction and instruction from Doctor Moffitt  
 during my junior and senior years and especially as his intern thereafter was  
 an outstanding privilege in my formative training. The example he transmitted  
 interest and concern in his patients, his effort to find the causes and the  
 treatment available in those years, his emphasis on the importance of  
 the current literature in English and also in French and German and his



dynamic, energetic and inspiring personality makes him the most important influence in my practice of medicine. As I met other Professors of Medicine in various medical schools in the east and mid-west and at medical meeting in subsequent years I never encountered anyone who excelled Doctor Moffitt in personality and diagnostic acumen and his knowledge of internal medicine.

During the first months of my intern year Doctor Moffitt suggested that I read German literature on serum proteins and that I use Doctor T. Bailsford Robertson's refractormetric method to determine serum albumin and globulin. With Doctor Tranter normal values were determined in the laboratory of the Hooper Foundation. These were published by us in the J.A.M.A. in 1914. In the spring of my intern year Doctor Moffitt asked what I wished to do in the following year. Knowing his famous record as a resident in Medicine at the Massachusetts General Hospital I expressed a desire to study in that institution. With Doctor Moffitt's request therefore Doctor David Edsall, Professor of Experimental Medicine in Harvard Medical School granted me an appointment as Assistant in Medicine at the Massachusetts General Hospital in Boston, with the opportunity to make rounds, attend lectures, observe the methods of diagnosis and treatment in the medical wards and also to determine serum albumin and globulin in various diseases with my refractormetric technique. Taking my refractormeter with me from our Medical School I was assigned to the experimental laboratory of Doctor Willy Dennis, Assistant Professor in Bio-Chemistry at Harvard. Along with me Doctor George Minot was doing his initial blood studies. Doctor Moss was supervising the first blood grouping for transfusions. Doctor Howard Means was studying thyroid disease. Doctor Orville Rogers was doing diabetic work under Doctor Joslin's supervision. In the adjoining pathology laboratory was Doctor Richardson. Doctor Richard Cabot was making rounds and working in the large clinic of the hospital. Both of them later established the



dynamic, energetic and inspiring personality makes him the most important influence in my practice of medicine. As I met other Professors of Medicine in various medical schools in the east and mid-west and at various meetings in subsequent years I never encountered anyone who excelled Doctor Wolff in personality and diagnostic acumen and his knowledge of internal medicine.

During the first months of my intern year Doctor Wolff suggested that I read German literature on serum proteins and that I use Doctor W. B. Ballou's retinotomographic method to determine serum albumin and globulin. With Doctor Thayer's normal values were determined in the laboratory of the Rockefeller Foundation. These were published by me in the J.A.M.A. in 1911. In the spring of my intern year Doctor Wolff asked what I wished to do in the following year. Knowing his famous record as a resident in Medicine at the Massachusetts General Hospital I expressed a desire to study in that institution. Doctor Wolff's request through Doctor David Knapp, Professor of Experimental Medicine in Harvard Medical School, granted me an appointment as Assistant in Medicine at the Massachusetts General Hospital in Boston, with an opportunity to make rounds, attend lectures, observe the methods of diagnosis and treatment in the medical wards and also to determine serum albumin and globulin in various diseases with my retinotomographic technique. Taking my retinometer with me from our Medical School I was assigned to the experimental laboratory of Doctor Willy Dennis, Assistant Professor in Bio-Chemistry at Harvard. Along with me Doctor George Minot was doing his initial blood studies. Doctor Minot was supervising the first blood grouping for transfusions. Doctor Minot was studying thyroid disease. Doctor Willis Rogers was doing his work under Doctor Joslin's supervision. In the adjoining pathology laboratory was Doctor Richardson. Doctor Richard Minot was making rounds and sitting in the large clinic of the hospital. Both of them later established the



famous Clinco-Pathological Conferences which continue to be published in the New England Journal of Medicine. This year spent at the M.G.H. resulted in my publication of six contributions on serum albumin and globulin in disease, these articles being the first in the literature. It established friendships with Doctor Minot, Doctor Paul White, who had been doing EKG's and studying heart diseases for two years after receiving his training with Doctor Thomas Lewis of London.

Doctor Elliot Joslin, who was beginning his important work in diabetes based on the work of Doctor F. M. Allen, who by the way, was a former graduate of our Medical School, and was working at the Rockefeller Institute. Doctor Joslin was in the wards of the Massachusetts General Hospital practically every day. I became greatly interested in the starvation treatment of diabetes which he was utilizing and brought this information back into my practice in California, making it possible for the first time to control most of these cases in a fairly satisfactory manner. During this year at the hospital I had the opportunity to develop friendships with residents and other physicians, many of whom have made great contributions to the various specialties since that time. While at the Massachusetts General moreover I visited most of the great hospitals in New York, Philadelphia, Johns Hopkins and Cleveland and of course frequently was in the Peter Bent Brigham Hospital in Brookline.

Doctor Moffitt's influence and advice continued after my return to California. Soon afterward he referred a case of bronchial asthma in a young girl addicted to morphine which was so frequently given for relief of asthma in those days. He had advised that I study asthma since I had plenty of free time for special problems. This led to my study of clinical allergy which was encouraged by him for many years thereafter. Because of my active study of diabetes with Doctor Joslin in the wards of the M.G.H. and the considerable number of diabetics I studied and treated during the first five years of my



various Clinical-Pathological Conferences which continue to be published in the  
 England Journal of Medicine. This year spent at the M.G.H. resulted in  
 publication of six contributions on serum albumin and globulin in disease,  
 these articles being the first in the literature. It established friendship  
 with Doctor Minot, Doctor Paul White, who had been doing X-ray and studying  
 and diseases for two years after receiving his training with Doctor Thomas  
 White of London.

Doctor Elliot Joslin, who was beginning his important work in diabetes  
 based on the work of Doctor P. M. Allen, who by the way, was a former graduate  
 of our Medical School, and was working at the Rockefeller Institute.

Doctor Joslin was in the wards of the Massachusetts General Hospital practically  
 every day. I became greatly interested in the starvation treatment of diabetes  
 which he was utilizing and brought this information back into my practice in  
 Minnesota, making it possible for the first time to control most of these cases  
 in a fairly satisfactory manner. During this year at the hospital I had the  
 opportunity to develop friendship with residents and other physicians, many of  
 whom have made great contributions to the various specialties since that time.

One of the Massachusetts General Hospital moreover I visited most of the great hospitals  
 in New York, Philadelphia, Johns Hopkins and Cleveland and of course frequently  
 in the Peter Bent Brigham Hospital in Boston.

Doctor McCall's influence and advice continued after my return to  
 Minnesota. Soon afterward he referred a case of bronchial asthma in a young  
 man addicted to morphine which was so frequently given for relief of asthma  
 at that time. He had advised that I study asthma since I had plenty of time  
 for special problems. This led to my study of clinical allergy which was  
 suggested by him for many years thereafter. Because of my active study of  
 asthma with Doctor Joslin in the wards of the M.G.H. and the considerable  
 work of diabetes I studied and treated during the first five years of my



practice in California, Doctor Moffitt told me of Banting's report on insulin which he had heard at an eastern meeting and he advised me to obtain directions for the preparation of insulin from Banting and Best. Making a crude insulin in my own laboratory resulted, which gave me the privilege of the initial use of the perfected insulin made by Lilly and Company thereafter. Because of Doctor Moffitt's interest in diabetes I had the honor to dedicate my first book "Handbook for Diabetics" published in 1928 by Oxford University to Doctor Moffitt.

In these encouragements and in many others for years thereafter, Doctor Moffitt continued his important influence on my medical career and that of his many other students and in fact on the entire medical profession, especially in Northern California.

*Albert H. Rowe*

Albert H. Rowe, M. S., M. D.



practice in California, Doctor Moffitt told me of Benedict's report on insulin which he had heard at an eastern meeting and he advised me to obtain directions for the preparation of insulin from Benedict and Best. Making a crude insulin from my own laboratory resulted, which gave me the privilege of the federal use of the patented insulin made by Lilly and Company thereafter. Because of Doctor Moffitt's interest in diabetes I had the honor to dedicate my first book "Handbook for Diabetes" published in 1928 by Oxford University to Doctor Moffitt. In these encounters and in many others ten years thereafter, Doctor Moffitt continued his important influence on my medical career and that of many other students and in fact on the entire medical profession, especially in California.

*Albert H. Rowe*  
 Albert H. Rowe, M.D., M.P.H.

ROOM 24  
 OFFICERS:  
 FRANCIS A. President  
 CARL E. Vice-President (Northern)  
 W. EUGENE Vice-President (Southern)  
 IONE R. Secretary  
 SAMUEL Treasurer  
 WILLIAM Councilor  
 EDWIN G. Councilor  
 HILLIARD Councilor  
 JACK D. Editor  
 FRANCES Executive



## ALUMNI-FACULTY ASSOCIATION

SCHOOL OF MEDICINE  
UNIVERSITY OF CALIFORNIA  
SAN FRANCISCO 22, CALIFORNIA

ROOM 244, MILLBERRY UNION

MONTROSE 4-3688

## OFFICERS: 1963-64

FRANCIS A. SOOY  
*President*

CARL E. ANDERSON  
*Vice-President*  
(Northern Area)

W. EUGENE STERN  
*Vice-President*  
(Southern Area)

IONE R. RAILTON  
*Secretary*

SAMUEL R. LEAVITT  
*Treasurer*

WILLIAM E. CARTER  
*Councilor-at-Large*

EDWIN G. CLAUSEN  
*Councilor*

HILLIARD J. KATZ  
*Councilor*

JACK D. LANGE  
*Editor*

FRANCES M. CARTER  
*Executive Secretary*

This remarkable paper is worthy  
of preservation.

It is significant of the great  
strides made in the School since  
its its early formative days.



[illegible]

Slid



## MAMMARY-STIMULATING HORMONES

The Seventh Annual Faculty Research Lecture, San Francisco Division of the Academic Senate, University of California, San Francisco, April 8, 1964

William Reginald Lyons

Mr. Chairman, Ladies and Gentlemen:

To Dr. Masouredis and the Committee on Research of the Senate goes my sincere gratitude for the honor and privilege of giving this 7th Annual Faculty Lecture. I also thank them for the eulogy that revealed things even to me. As it was read, it occurred to me that I was much better off than the man who "pretended to be dead and listened in vain for the accolades of his survivors."

My life-time chief, Professor Herbert Evans, and my long-time colleague, Professor C.H. Li, in the 3rd and 6th Annual Faculty Lectures, here, on "The Pituitary" have introduced the theme that I propose to expand today. Those of us addicted to the Pituitary have always admired it as a many-splendored gland; and for over 30 years, with much help from my colleagues, students and technicians, I have been trying to focus and reflect the colorful brilliance of its numerous facets on one particular organ - "The Mammary Gland" or "The Breast" as it is called in primates and man. This preoccupation has been so prolonged that you will not be surprised to learn that whenever a visitor to our laboratory is kind enough to inquire about me, Dr. Evans always replies: "Oh, he is still on the breast."

If this should seem to you a rather long time to remain unweaned, my  
Slide 1) first defense will be to show you the Schema that I first put together 10 years



MAMMARY-STIMULATING HORMONES

The Seventh Annual Faculty Research Lecture, San Francisco Division of  
the Academic Senate, University of California, San Francisco, April 8, 1964

William Reginald Lyons

Mr. Chairman, Ladies and Gentlemen:

To Dr. Massarelli and the Committee on Research of the Senate goes

my sincere gratitude for the honor and privilege of giving this 7th Annual  
Faculty Lecture. I also thank them for the empathy that revealed things even  
to me. As it was read, it occurred to me that I was much better off than the  
man who "pretended to be dead and listened in vain for the accolades of his  
survivors."

My life-time chief, Professor Herbert Evans, and my long-time col-  
league, Professor C. H. Li, in the 3rd and 6th Annual Faculty Lectures,  
here, on "The Pituitary" have introduced the theme that I propose to expand  
today. Those of us addicted to the Pituitary have always admired it as a  
many-splendored gland; and for over 30 years, with much help from my col-  
leagues, students and technicians, I have been trying to focus and reflect  
the colorful brilliance of its numerous facets on one particular organ - "The  
Mammary Gland" or "The Breast" as it is called in primates and man. This  
preoccupation has been so prolonged that you will not be surprised to learn  
that whenever a visitor to our laboratory is kind enough to inquire about me,  
Dr. Evans always replies: "Oh, he is still on the breast."

If this should seem to you a rather long time to remain unweaned, my  
first defense will be to show you the Schema that I first put together 10 years



ago on the basis of about 20 years of interrupted experimentation. It should be labelled "The Mammary Jig-saw Puzzle of the Long-Evans Rat," because all of its pieces do not necessarily fit the picture in man nor even that of other animals. This is primarily due to the fact that our conclusions had to be based on the results obtained in what is often referred to as an "endocrinectomized" rat (i. e. one with pituitary, gonads, adrenals, thyroids and parathyroids removed). Rarely are such human subjects available.

Even after removing these key endocrine organs to facilitate interpretation of our results, we eventually used the local administration technic to determine which hormones acted directly upon the mammary gland. Hearing this, you will wonder why we have bothered to use intact rats or even "endocrinectomized" rats, when "in vitro" organ cultures should respond as well as a gland "in situ". My answer is that such is the kind of thinking that started the exciting new research by Dr. Joel Elias now with the Anatomy Department and formerly with Professors DeOme and Bern who at U. C. Berkeley have a superb group of mammary culturists now writing the newest chapter in this field. With minute amounts of hormones they obtain growth and functional responses qualitatively comparable to those we have obtained in the animals. This applies only to the directly-acting mammary-stimulating hormones. For studies on those that function indirectly we have had to continue using rats that have undergone various operative procedures. In the hands of Dr. Nandi working also with Professors Bern and DeOme similarly operated mice of some, but not all, strains respond to essentially



ago on the basis of about 20 years of interrupted experimentation. It should be labelled "The Mammary Lip-aw Puzzle of the Long-Evans Rat," because

all of its pieces do not necessarily fit the picture in man nor even that of

other animals. This is primarily due to the fact that our conclusions had

to be based on the results obtained in what is often referred to as an "endo-

crinectomized" rat (i.e. one with pituitary, gonads, adrenals, thyroids and

parathyroids removed). Rarely are such human subjects available.

Even after removing these key endocrine organs to facilitate interre-

lation of our results, we eventually used the local administration technique to

determine which hormones acted directly upon the mammary gland. Hearing

this, you will wonder why we have bothered to use intact rats or even "en-

doctrinized" rats, when "in vitro" organ cultures should respond as

well as a gland "in situ". My answer is that such is the kind of thinking that

started the exciting new research by Dr. Joel Ellis now with the Anatomy

Department and formerly with Professors Deane and Bern who at U.C.

Berkeley have a superb group of mammary endocrinologists now writing the new-

est chapter in this field. With minute amounts of hormones they obtain

growth and functional responses qualitatively comparable to those we have

obtained in the animals. This applies only to the directly-acting mammary-

stimulating hormones. For studies on those that function indirectly we have

had to continue using rats that have undergone various operative procedures.

In the hands of Dr. Nandi working also with Professors Bern and Deane

similarly operated mice of some, but not all, strains respond to essentially



the same hormonal "cocktails" as do our rats.

In the schema, I have attempted to show that all of the six anterior pituitary hormones may act directly or indirectly upon the mammary gland. The pituitary cells may be stimulated or inhibited by brain secretions; and one of these in particular (oxytocin) acts directly on the contractile cells of the mammary gland to help deliver the milk. In an attempt at simplification, I omitted from the Schema the reverse arrows from the target organs indicating stimulus or inhibition of the brain or pituitary by the various target organ hormones.

Of the anterior pituitary hormones, only two act directly on the mammary gland, namely: (1) Mammothrophin (also known as lactogenic or luteotrophic hormone or prolactin); and (2) Somatotrophin also known as growth hormone that stimulates ductal or alveolar mammary development in contradistinction to the general term "Lactogen" which implies milk synthesis. Mammogenic and lactogenic activities may be direct or indirect.

The follicle and interstitial cell-stimulating hormones activate the ovarian follicle to secrete the primary female sex hormone (Estrin) which acts directly on the mammary gland together with Somatotrophin to stimulate mainly duct proliferation. Mammothrophin stimulates the corpus luteum to secrete the secondary female sex hormone (Progestin) which acts directly upon the mammary gland together with Estrin, Somatotrophin and Mammothrophin to induce the pregnancy type of mammary growth. Mammothrophin is thus a direct and indirect Mammogen; and is also a direct Lactogen because



the same hormonal "cocktail" as do our rats. In the scheme, I have attempted to show that all of the anterior pituitary hormones may act directly or indirectly upon the mammary gland. The pituitary cells may be stimulated or inhibited by brain secretions; and one of these in particular (oxytocin) acts directly on the contractile cells of the mammary gland to help deliver the milk. In an attempt at simplification, I omitted from the scheme the reverse arrows from the target organs indicating stimulus or inhibition of the brain or pituitary by the various target organ hormones. Of the anterior pituitary hormones, only two act directly on the mammary gland, namely: (1) Mammatrophin (also known as lactogenic or lactotrophic hormone or prolactin); and (2) Somatotrophin also known as growth hormone that stimulates ductal or alveolar mammary development in contrast to the general term "lactogen" which implies milk synthesis. Mammatogenic and lactogenic activities may be direct or indirect. The follicle and interstitial cell-stimulating hormones activate the ovarian follicle to secrete the primary female sex hormone (Estrogen) which acts directly on the mammary gland together with Somatotrophin to stimulate mainly duct proliferation. Mammatrophin stimulates the corpus luteum to secrete the secondary female sex hormone (Progesterin) which acts directly upon the mammary gland together with Estrogen, Somatotrophin and Mammatrophin to induce the pregnancy type of mammary growth. Mammatrophin is thus a direct and indirect Mammatogenic and is also a direct Lactogen because



with an adrenal steroid, it induces milk secretion. Some Somatotrophins in some animals are also direct Lactogens. ACTH is an indirect Lactogen because it stimulates the adrenal cortex to secrete adrenal steroids necessary with Mammothrophin for milk secretion. It may also be classified as an indirect Mammogen because some of the adrenal steroids formed under its influence may mimic the actions of the ovarian hormones. Although we have shown that mammary growth and secretion may be induced without hormones, it is known that iodo-compounds do influence milk secretion favorably; and the fact that the mammary gland makes its own iodotyrosines should not go unnoticed.

The Placenta belongs in the Schema because depending upon the species and certainly in rats and humans, it may synthesize and secrete hormones that function like those of the pituitary and ovary.

Because of the clinical and professional nature of much of this audience I have decided to attempt to weave together experimental animal facts and human parallels and probabilities; and thus illustrate how certain breast syndromes have been duplicated in the experimental animal. Sketched in the diagram are the four main mammary phases: Upper quadrant = rudimentary; Right quadrant = that of adolescence; Lower quadrant = that of pregnancy or pseudo-pregnancy; Left quadrant = of milk secretion. These could be said to correspond to similar phases in human breast growth with the understanding that the cyclic growth and regression that occurs with the menstrual cycle would be representative of a sort of pseudopregnancy.



4.

With an adrenal steroid, it induces milk secretion. Some somatotrophins in some animals are also direct lactogens. ACTH is an indirect lactogen because it stimulates the adrenal cortex to secrete adrenal steroids necessary with Mammotropin for milk secretion. It may also be classified as an indirect Mammogen because some of the adrenal steroids formed under its influence may mimic the action of the ovarian hormones. Although we have shown that mammary growth and secretion may be induced without hormones, it is known that iodo-compounds do influence milk secretion favorably; and the fact that the mammary gland makes its own iodotyrosines should not go unnoticed.

The Placenta belongs in the Schema because depending upon the species and certainly in rats and humans, it may synthesize and secrete hormones that function like those of the pituitary and ovary.

Because of the clinical and professional nature of much of this audience I have decided to attempt to weave together experimental animal facts and human parallels and probabilities; and thus illustrate how certain breast syndromes have been duplicated in the experimental animal. Sketched in the diagram are the four main mammary phases: Upper quadrant = rudimentary; Right quadrant = that of adolescence; Lower quadrant = that of pregnancy or pseudo-pregnancy; Left quadrant = of milk secretion. These could be said to correspond to similar phases in human breast growth with the understanding that the cyclic growth and regression that occurs with the menstrual cycle would be representative of a sort of pseudo-pregnancy.



Phase 1 showing only a rudimentary duct system may be seen in the fetal and early post-natal rat; and it may be approximated in older animals by removal of the pituitary or the ovaries; thus demonstrating the hormonal dependency of all subsequent mammary growth phases - except some cancers.

Phase 2 showing a proliferating duct system with side-branching and bulbous ends is found in the rat before sexual maturity just as in a prepubertal girl. However, the first noticeable evidence of hormonal influence on the human breast is seen in newborn babies of both sexes.

Slide 2)

Statistics show that in about two-thirds of all newborn infants one may detect some breast overgrowth; and from about two-thirds of such glands, milk or colostrum may be expressed.

Basing the interpretation of this growth and function on experimental work, it would seem necessary to consider the possibility that maternal and fetal, pituitary, adrenal, gonadal and placental hormones might be involved in the breast growth in the human fetus such as shown.

Slide 3)

A reconstruction of a gland from a 200 mm male fetus.

The human placenta contains at least Estrin, Progesterin and a Mammothrophin-like hormone. These hormones function very well in immature "endocrinectomized" rats of either sex to build a miniature lobulo-alveolar type of mammary gland; and that is all the best development in the newborn infant could be called. Lesser degrees of development have been induced by two hormones, Estrin and Somatotrophin.

Slide 4)

The types of miniature glands developed as stated: (1) Control; (2) Estrin and Somatotrophin; (3) Estrin and Progesterin and Mammothrophin.



Phase 1 showing only a rudimentary duct system may be seen in the fetal and early post-natal rat; and it may be approximated in older animals by removal of the pituitary or the ovaries; thus demonstrating the hormonal dependency of all subsequent mammary growth phases - except some cancers.

Phase 2 showing a proliferating duct system with side-branching and bulbous ends is found in the rat before sexual maturity just as in a prepubertal girl. However, the first noticeable evidence of hormonal influence on the human breast is seen in newborn babies of both sexes.

Statistics show that in about two-thirds of all newborn infants one may detect some breast overgrowth; and from about two-thirds of such glands, milk or colostrum may be expressed.

Having the interpretation of this growth and function on experimental work, it would seem necessary to consider the possibility that maternal and fetal, pituitary, adrenal, gonadal and placental hormones might be involved in the breast growth in the human fetus such as shown.

A reconstruction of a gland from a 300 mm male fetus.

The human placenta contains at least Estrogen, Progesterone and a Mammo-

trophin-like hormone. These hormones function very well in immature "endocrinotomized" rats of either sex to build a miniature lobule-alveolar type of mammary gland; and that is all the best development in the newborn infant could be called. Lesser degrees of development have been induced by

two hormones, Estrogen and Somatotrophin.

The types of miniature glands developed are stated: (1) Control; (2) Estrogen and Somatotrophin; (3) Estrogen and Progesterone and Mammotrophin.



With the separation of the baby from its placenta, the infant's breast can no longer depend on a continuing source of placental hormones; although these have been shown to persist in the circulation for some days after birth. However, the only hormones necessary to induce milk-secretion in the breasts developed in late fetal life would be Mammothrophin and an adrenal steroid. In urines obtained for me by Dr. Francis Smyth from male and female infants showing witch's-milk secretion, I detected Mammothrophin and of course the adrenal cortex in such cases would be active.

Slide 5) The assay procedure we used for estimating the Mammothrophin content of the infant's urine. This local pigeon crop test detects 0.1  $\mu$ g of pure ovine Mammothrophin and about 0.7  $\mu$ g of human Mammothrophin.

Slide 6) A miniature lactating rat mammary gland treated locally with human Mammothrophin plus Cortisol. The picture is comparable to that seen in the newborn baby's secreting breast.

Slides 7-8 The histologic picture of the condition often referred to as "mastitis neonatorum" reproduced in immature male rabbits injected first with Estrone and then with Mammothrophin.

In most infants of both sexes there is a regression from a functioning miniature breast to a quiescent one until the pre-pubertal growth occurs - often in the male as well as the female. It is not surprising that Estrin and Somatotrophin represent the minimal requirement for ductal mammary growth. A rat between 1 and 2 months of age is growing rapidly in response to Somatotrophin; and its ovaries are secreting small amounts of Estrin prior to the institution of regular sexual cycles. Such an animal might be said to correspond to a young girl in the 2 or 3 year period of breast duct



With the separation of the baby from its placenta, the infant's breast can no longer depend on a continuing source of placental hormones; although these have been shown to persist in the circulation for some days after birth. However, the only hormones necessary to induce milk-secretion in the breasts developed in late fetal life would be Mammatrophin and an adrenal steroid. In urines obtained for me by Dr. Francis Smyth from male and female infants showing witch's-milk secretion, I detected Mammatrophin and of course the adrenal cortex in each case would be active.

The assay procedure we used for estimating the Mammatrophin content of the infant's urine. This local pigeon crop test detects 0.1  $\mu$ g of pure ovine Mammatrophin and about 0.7  $\mu$ g of human Mammatrophin.

A miniature lactating rat mammary gland treated locally with human Mammatrophin plus Cortisol. The picture is comparable to that seen in the newborn baby's secreting breast.

The histologic picture of the condition often referred to as "mammitis neonatorum" reproduced in miniature male rats injected first with Estrone and then with Mammatrophin.

In most infants of both sexes there is a regression from a functioning

miniature breast to a quiescent one until the pre-pubertal growth occurs - often in the male as well as the female. It is not surprising that Estrin and Somatotrophin represent the minimal requirement for ductal mammary

growth. A rat between 1 and 3 months of age is growing rapidly in response to Somatotrophin; and its ovaries are secreting small amounts of Estrin prior to the institution of regular sexual cycles. Such an animal might be said to correspond to a young girl in the 2 or 3 year period of breast duct



growth preceding the first menstruation.

The proof that Somatotrophin is a direct duct-stimulating Mammogen when injected with Estrin came only when Dr. C.H. Li was able to supply the purified bovine Somatotrophin (and more recently, the human Somatotrophin). This experiment was one of the many in which Miss Ruth Johnson participated extensively; and were first reported by Dr. Roger Cole at the 1954 Detroit meetings on "The Growth Hormone." We showed that Somatotrophin could be assayed on the basis of ductal mammary growth in immature endocrinectomized male or female rats as well as by the more common tibial cartilage test. Even in large doses, Somatotrophin had little effect on the mammary gland until a small dose of 1  $\mu$ g of Estrone was also injected.

Slide 9

- (1) The lack of any effect of bovine Somatotrophin alone on the atrophic duct system of "endocrinectomized" male rats; and
- (2) the beginning ductal growth induced by adding 1  $\mu$ g Estrone.

Our recent work has proven that human Somatotrophin acts with Estrone just as did the bovine Somatotrophin to induce this ductal growth. These minimal effects are obtained by giving locally doses of about 5  $\mu$ g of Somatotrophin. Larger systemic doses (1-2 mg) also have indirect beneficial effects because of generally improved appetite and metabolism in such animals.

That Estrin is not a Mammogen in the absence of the pituitary was shown about 30 years ago in experiments performed with Dr. Richard Pencharz.

Slide 10

Estrone induced remarkably good mammary growth in intact male guinea pigs, but not in those with pituitaries removed.



growth preceding the first menstruation.

The proof that Somatotrophin is a direct duct-stimulating Mammogen when injected with Estrin came only when Dr. C.H. Li was able to supply the purified bovine Somatotrophin (and more recently, the human Somatotrophin). This experiment was one of the many in which Miss Ruth Johnson participated extensively and were first reported by Dr. Roger Cole at the 1954 Detroit meetings on "The Growth Hormone." We showed that Somatotrophin could be assayed on the basis of ductal mammary growth in immature endocrinectomized male or female rats as well as by the more common tibial cartilage test. Even in large doses, Somatotrophin had little effect on the mammary gland with a small dose of 1 µg of Estrone was also injected.

(1) The lack of any effect of bovine Somatotrophin alone on the atrophic duct system of "endocrinectomized" male rats and (2) the beginning ductal growth induced by adding 1 µg Estrone.

Our recent work has proven that human Somatotrophin acts with Estrone just as did the bovine Somatotrophin to induce this ductal growth. These minimal effects are obtained by giving locally doses of about 5 µg of Somatotrophin. Larger systemic doses (1-2 mg) also have indirect beneficial effects because of generally improved appetite and metabolism in such animals.

That Estrin is not a Mammogen in the absence of the pituitary was shown about 30 years ago in experiments performed with Dr. Richard Penhagar. Estrone induced remarkably good mammary growth in intact male guinea pigs, but not in those with pituitaries removed.



Slide 11

About that same time Sako and I were obtaining good mammary growth in male rabbits by rubbing a drop of sesame oil containing 0.3  $\mu$ g of Estrone over one mammary region daily, 5 days a week for 5 weeks. The contra-lateral control gland receiving only the oil remained rudimentary.

Because our rabbits were intact, and because of the negative results with Estrone alone in animals with pituitaries removed, we concluded that the Estrone was effective as a local Mammogen only in association with a circulating pituitary hormone. However, this was the first demonstration that Estrin is a direct mammary-stimulating hormone in the intact animal. In the same year Dr. Cyril MacBryde reported similar success in women. His patients with under-developed breasts preferred to have them developed symmetrically.

Slide 12

The growth induced in one patient with 10 mg Estradiol ointment applied 3 times a week for 3 months.

Slide 13

From a case of unilateral breast atrophy the right breast before and after nightly inunctions of 2.5 mg Estradiol into the skin of only that breast for 3 months. The left breast receiving only the lanolin base without hormone began to show slight growth towards the end of the experiment indicating some systemic absorption. With cessation of treatment, the breasts regressed.

Experiments on the induction of mammary growth by means of hormonal administration to males as well as females have given us a basis for understanding the condition of Gynecomastia. In the second century Galen used this term to describe a fat-breasted man. However, since then some physicians have learned to distinguish parenchymal breast hypertrophy in contradistinction to the pendulant panniculus of too well nourished men. There are many possible explanations for true gynecomastia; some cases of



About that same time Sako and I were obtaining good mammary growth in male rabbits by rubbing a drop of sesame oil containing 0.8 mg of Estrone over one mammary region daily, 5 days a week for 5 weeks. The contralateral control gland receiving only the oil remained rudimentary.

Because our rabbits were intact, and because of the negative results with Estrone alone in animals with pituitaries removed, we concluded that the Estrone was effective as a local Mammary only in association with a circulating pituitary hormone. However, this was the first demonstration that Estrin is a direct mammary-stimulating hormone in the intact animal. In the same year Dr. Cyril MacBride reported similar success in women. His patients with under-developed breasts preferred to have them developed

symmetrically.

The growth induced in one patient with 10 mg Estradiol ointment applied 3 times a week for 3 months.

From a case of unilateral breast atrophy the right breast before and after right injections of 2.5 mg Estradiol into the skin of only that breast for 3 months. The left breast receiving only the lanolin base without hormone began to show slight growth towards the end of the experiment indicating some systemic absorption. With cessation of treatment, the breasts regressed.

Experiments on the induction of mammary growth by means of hormonal administration to males as well as females have given us a basis for understanding the condition of Gynecomastia. In the second century Galen used this term to describe a fat-breasted man. However, since then some physicians have learned to distinguish paraneoplastic breast hypertrophy in contradistinction to the pendulous panniculus of the well nourished man. There are many possible explanations for true gynecomastia; some cases of



which may have persisted since infancy; some becoming prominent in the adolescent boy; some occurring at any age in association with liver disease, malnutrition, a variety of tumors, endocrinopathies, etc. and some induced by hormonal injections as for example in transvestites such as Christine Jorgensen and in men treated for prostatic cancer.

Slide 14      Gynecomastia in an adolescent boy.

Slide 15      A cast made from the breast of such a case.

A recent survey in about 2000 boy scouts 10-16 years old showed some gynecomastia in about 40% with a peak of 65% in the 14 year old group.

Slide 16      Both fat and parenchymal breast overgrowth in a 52 year old impotent, hypothyroid man with what was diagnosed as a "chromophobe adenoma of the pituitary". Probably we would now use the term Mammotroph hyperplasia or adenoma.

In 1900 Rothschild in France listed over 10,000 papers in the world literature on the mammary gland and since then the number has more than doubled. A surprising number of these dealt with gynecomastia and galactorrhea; and sometimes these conditions were found in the same individual which would make such a man a potential wet-nurse. One of the earliest references to a lactating man may be found in the Talmud (Sabbath 53B) which was translated as follows: "A man unable to afford a wet nurse after his wife's death in childbirth miraculously lactated and was able to nurse his child."

Such bible truths and authentic clinical reports of men secreting milk are well supported by our experiments in male rats, mice, guinea pigs,



which may have persisted since infancy; some becoming prominent in the adolescent boy; some occurring at any age in association with liver disease, malnutrition, a variety of tumors, endocrinopathies, etc. and some induced by hormonal injections as for example in transvestites such as Christine Jorgensen and in men treated for prostatic cancer.

Gynecomastia in an adolescent boy.

A cast made from the breast of such a case.

A recent survey in about 3000 boy scouts 10-18 years old showed

some gynecomastia in about 40% with a peak of 65% in the 14 year old group.

Both fat and parenchymal breast overgrowth in a 28 year old impotent, hypothyroid man with what was diagnosed as a "chromophobe adenoma of the pituitary". Probably we would now use the term Mammotroph hyperplasia or adenoma.

In 1900 Rothschild in France listed over 10,000 papers in the world

literature on the mammary gland and since then the number has more than doubled. A surprising number of these dealt with gynecomastia and galact-

tores; and sometimes these conditions were found in the same individual

which would make such a man a potential wet-nurse. One of the earliest

references to a lactating man may be found in the Talmud (Sabbath 52B)

which was translated as follows: "A man unable to afford a wet nurse after

his wife's death in childbirth miraculously lactated and was able to nurse

his child."

Such bible truths and authentic clinical reports of men secreting milk

are well supported by our experiments in male rats, mice, guinea pigs,



rabbits and monkeys. It has been possible to reproduce any of the normal and some abnormal mammary growth phases in the male up to and including milk secretion with the same array of hormones as used in the female.

Slide 17 Effects of different daily doses of Estrone on the male rabbits' mammary glands with cyst formation at the 1 mg level. When 1 mg of Progesterone was added to these doses of Estrone (even to the level of causing cyst formation) the extensive lobulo-alveolar growth characteristic of pregnancy ensued.

Slide 18 The male gland prepared by either of these treatments required only the addition of Mammothrophin for milk secretion.

The next phase of breast development to consider is that coinciding with the beginning of the menstrual periods, at which time the breast becomes a cyclic organ just as does the genital tract. Both of these organs depend upon levels of the ovarian hormones for their different developmental phases. Like the genital tract, the mammary gland requires the indirect effects of the pituitary gonadotrophins for Estrin formation, and a pituitary luteotrophin for Progestin secretion. Both organs require the direct action of the two ovarian hormones. However, the genital tract unlike the mammary gland may respond to the ovarian hormones without the help of the directly-acting pituitary mammogens.

Slide 19 From Moskowicz shows that the breast has menstrual cycles just as does the genital tract. It is composed of many individual glands which show: (1) a follicular or Estrin-phase; (2) a luteal phase which should always be called a combined Estrin-Progestin phase; (3) a slight secretory phase corresponding to menstruation; and (4) a short involutionary phase.

These phases can be imitated in male animals or females with ovaries removed by treating with Estrin, then Estrin plus Progestin, and finally



rabbits and monkeys. It has been possible to reproduce any of the normal and some abnormal mammary growth phases in the male up to and including milk secretion with the same array of hormones as used in the female.

Effects of different daily doses of Estrone on the male rabbit's mammary glands with cyst formation at the 1 mg level. When 1 mg of Progesterone was added to these doses of Estrone (even to the level of causing cyst formation) the extensive lobulo-alveolar growth characteristic of pregnancy ensued.

The male gland prepared by either of these treatments required only the addition of Mammothrophin for milk secretion.

The next phase of breast development to consider is that coinciding with the beginning of the menstrual periods, at which time the breast becomes a cyclic organ just as does the genital tract. Both of these organs depend upon levels of the ovarian hormones for their different developmental phases. Like the genital tract, the mammary gland requires the indirect effects of the pituitary gonadotrophins for Estrin formation, and a pituitary lactotrophin for Progesterin secretion. Both organs require the direct action of the two ovarian hormones. However, the genital tract unlike the mammary gland may respond to the ovarian hormones without the help of the directly-

acting pituitary mammogens.

From Moskowitz shows that the breast has menstrual cycles just as does the genital tract. It is composed of many individual glands which show: (1) a follicular or Estrin phase; (2) a luteal phase which should always be called a combined Estrin-Progesterin phase; (3) a slight secretory phase corresponding to menstruation; and (4) a short involutary phase.

These phases can be initiated in male animals or females with ovaries removed by treating with Estrin, then Estrin plus Progesterin, and finally



Mammotrophin followed by cessation of treatment.

The cyclic breast presents various interesting clinical problems many of which have a hormonal basis (e. g. chronic cystic mastitis, premenstrual engorgement with mastalgia, galactorrhea, etc.). The simplest of all of these are the cases in which a woman may express a small amount of milk from the breast each month before or at the onset of her menstrual period. Cases have been described in which the breast cycle with milk secretion replaced the uterine cycle. Antedating Chiarri, Frommel and others by about 2000 years, Hippocrates noted: "If a woman who is not with child, nor has brought forth a child, have milk, her menses are obstructed." It should be remembered that once the mammary gland has reached even a slight degree of alveolar development, the ovarian hormones are not only unnecessary for milk secretion but actually may be inhibitory. Thus menopausal women or those with ovaries removed may continue to secrete milk for years, since for this, the pituitary need only secrete Mammotrophin and Corticotrophin. Ehni and Eckles observed persistent milk secretion in women with ovaries, adrenals and one cancerous breast removed, with pituitary stalk sectioned, and on cortisol treatment.

Slide 20 Severed stalk and partially atrophied pituitary in its sella turcica.

Slide 21 Milk being expressed from the patient's breast.

Pituitaries dissociated from the brain such as in this case, secrete only Mammotrophin in appreciable amounts as Mr. Ahmad and I (and others) have demonstrated in oophorectomized rats with pituitaries transplanted to



Mammotrophin followed by cessation of treatment. The cyclic breast presents various interesting clinical problems, many of which have a hormonal basis (e.g. chronic cystic mastitis, premenstrual engorgement with mastalgia, galactorrhoea, etc.). The simplest of all of these are the cases in which a woman may express a small amount of milk from the breast each month before or at the onset of her menstrual period. Cases have been described in which the breast cycle with milk secretion replaced the uterine cycle. Antebating Child, Fernald and others. The next phase of breast development is that of the lactating woman. Hippocrates noted: "If a woman who is not with child, not has brought forth a child, have milk, her menses are obstructed." It should be remembered that once the mammary gland has reached even a slight degree of alveolar development, the ovarian hormones are not only unnecessary for milk secretion but actually may be inhibitory. Thus menopause in women or those with ovaries removed may continue to secrete milk for years, since for this, the pituitary need only secrete Mammotrophin and Corticotrophin. Ehm and Eckles observed persistent milk secretion in women with ovaries, adrenals and one cancerous breast removed, with pituitary stalk sectioned, and on cortisol treatment. Severed stalk and partially atrophied pituitary in the sella turcica. Milk being expressed from the patient's breast. Pituitaries dissociated from the brain such as in this case, secrete only Mammotrophin in appreciable amounts as Mr. Ahmad and I (and others) have demonstrated in oophorectomized rats with pituitaries transplanted to

Slide

Slide

30

31



the kidney capsule.

Slide 22

The importance of cortisol as a co-lactogen because the rats with grafts and no cortin did not secrete milk.

I have jumped ahead of the schema in order to deal briefly with the clinical syndrome of milk secretion not preceded by pregnancy. Just as with gynecomastia there may be many initiating factors in galactorrhea which vary from witch doctors' incantations and herbal concoctions to the deadly choriocarcinoma, or a seemingly simple thoracoplasty.

Slide 23

Further inspection of the Schema reveals that in rats with only the pituitary removed one may induce the lobulo-alveolar type of growth characteristic of pregnancy by injecting four anterior pituitary hormones. The two gonadotrophins induce Estrin secretion by the ovary and this acts with Somatotrophin to stimulate duct growth. Mammotrophin induces the corpus luteum to secrete Progesterone; and because it is also a direct Mammogen, its combined action with Progesterone and Estrin induces beginning lobulo-alveolar development. Somatotrophin is necessary for complete lobulo-alveolar growth just as it was for duct growth. When the ovaries and adrenals are also removed from such hypophysectomized rats the same pregnancy-type of growth is induced by replacing the gonadotrophins and the ovaries with Estrin and Progesterone, and by replacing the adrenals with Cortin and injecting Mammotrophin and Somatotrophin as before. Direct application of these hormones to a localized area of one mammary gland resulted in lobulo-alveolar growth only in that area of the gland.



the kidney capsule.

The importance of cortisol as a co-lactogen because the rats with grafts and no cortin did not secrete milk.

I have jumped ahead of the scheme in order to deal briefly with the clinical syndrome of milk secretion not preceded by pregnancy. Just as with gynecomastia there may be many initiating factors in galactorrhoea which vary from witch doctors' incantations and herbal concoctions to the deadly choriocarcinoma, or a seemingly simple theocapnia.

Further inspection of the scheme reveals that in rats with only the pituitary removed one may induce the lobulo-alveolar type of growth characteristic of pregnancy by injecting four anterior pituitary hormones. The two gonadotrophins induce Estrin secretion by the ovary and this acts with Somatotrophin to stimulate duct growth. Mammotrophin induces the corpus luteum to secrete Progesterin; and because it is also a direct Mammogen, its combined action with Progesterin and Estrin induces beginning lobulo-alveolar development. Somatotrophin is necessary for complete lobulo-alveolar growth just as it was for duct growth. When the ovaries and adrenals are also removed from such hypophysectomized rats the same pregnancy-type of growth is induced by replacing the gonadotrophins and the ovaries with Estrin and Progesterin, and by replacing the adrenals with Cortin and injecting Mammotrophin and Somatotrophin as before. Direct application of these hormones to a localized area of one mammary gland resulted in lobulo-alveolar growth only in that area of the gland.



Slide 24 Effect obtained by implanting a pellet composed of the Mammo-  
genic quartet - Estrone, Progesterone, Mammotrophin and  
Somatotrophin in a castrated-hypophysectomized male rat.

Slide 25 Our human Mammotrophin can be substituted for the combina-  
tion of ovine Mammotrophin and bovine Somatotrophin in a  
triply-operated immature female rat.

A rat placental Mammotrophin-like hormone may also substitute for those two pituitary hormones in acting with Estrin and Progestin to induce the lobulo-alveolar growth of pregnancy. It was because the placenta synthesizes this hormone, which is strongly luteotrophic (or corpus-luteum activating), that Pencharz and Long in 1931 were able to remove the rat's pituitary at mid-gestation without interrupting pregnancy. Proof that this placental factor is also mammary growth stimulating and lactogenic came mostly from the work of two of our students, Drs. Averill and Ray; and more recently from the doctoral thesis of Mr. Donald Matthies, who is now purifying this hormone; and who has revealed its presence in the blood and urine of pregnant rats. In Japan and in this country a somewhat similar substance has been prepared from human term placentae.

Before leaving this phase of mammary growth I should like to make a plea for more clinical research on pituitary and placental luteotrophic activity which by animal tests has been demonstrated in extracts of human pituitaries and placenta. Adequate tests have not yet been made of these human fractions in monkeys and man; and the discovery in 1941 by Evans, Simpson, Turpeinen and Lyons that our purified ovine Mammotrophin is corpus-luteum activating in the rat applied to that species of hormone, and that test animal



Effect obtained by implanting a pellet composed of the Mammo-  
genic quartet - Estrone, Progesterone, Mammothrophin and  
Somatotrophin in a castrated-hypophysectomized male rat.  
Our human Mammothrophin can be substituted for the combina-  
tion of ovine Mammothrophin and bovine Somatotrophin in a  
triply-operated immature female rat.  
A rat placental Mammothrophin-like hormone may also substitute for  
those two pituitary hormones in acting with Estrone and Progesterone to induce  
the lobulo-alveolar growth of pregnancy. It was because the placenta synthe-  
sized this hormone, which is strongly luteotrophic (or corpus-luteum acti-  
vating), that Penhays and Long in 1951 were able to remove the rat's placen-  
ta at mid-gestation without interrupting pregnancy. Proof that this pla-  
cental factor is also mammary growth stimulating and luteogenic came  
mostly from the work of two of our students, Drs. Averil and Ray, and more  
recently from the doctoral thesis of Mr. Donald Mathies, who is now pur-  
suing this hormone; and who has revealed its presence in the blood and urine  
of pregnant rats. In Japan and in this country a somewhat similar substance  
has been prepared from human term placentae.  
Before leaving this phase of mammary growth I should like to make a  
plea for more clinical research on pituitary and placental luteotrophic acti-  
vity which by animal tests has been demonstrated in extracts of human pitui-  
taries and placentae. Adequate tests have not yet been made of these human  
fractions in monkeys and man; and the discovery in 1941 by Evans, Simpson,  
Turpeinen and Lyons that our purified ovine Mammothrophin is corpus-luteum  
activating in the rat applied to that species of hormone, and that test animal



only. Studies on the maintenance of pregnancy should go hand in hand with those on breast growth because as we have shown in animals, the same hormones assure both the fetus and the infant of proper nourishment.

Slide 26 Turning to the last phase of mammary growth as indicated in the schema it will be noticed that this is the functional or milk secretion phase. It consists of lactational growth in contrast to that of the preceding phase which is pre-lactational. The pre-lactational mammary growth of pregnancy consists of an extensive multiplication of alveoli on a proliferating duct system giving rise to elaborate lobules that have largely replaced the fatty tissue of the cyclic breast. In contrast, the lactational growth is at first one of hyperplasia of the alveolar cells, not to form more alveoli, but to expand all of the existing ones; and then to control the cycle of functional growth and secretion involved in the extremely complex synthesis of milk. In our "endocrinectomized" rats, only the lactogenic actions of Mammothrophin and cortisol were necessary to accomplish this. In the organ culture work of Elias, Rivera and others, insulin had to be added along with these two hormones to synthetic media to induce milk secretion.

I should like to pay tribute to two students of the late Professor Bouin of Strasbourg, Stricker and Grueter, who announced in 1928 the discovery of a lactogenic activity in an Evans and Simpson type of extract of cattle pituitaries. Injection of these extracts into oophorectomized rabbits induced prompt milk secretion. Later in this country Professor George Corner of Rochester, and Catchpole and I, here confirmed this in virgin rabbits and



only. Studies on the maintenance of pregnancy should go hand in hand with those on breast growth because as we have shown in animals, the same hormones assure both the fetus and the infant of proper nourishment. Turning to the last phase of mammary growth as indicated in the scheme it will be noticed that this is the functional or milk secretion phase. It consists of lactational growth in contrast to that of the preceding phase which is pre-lactational. The pre-lactational mammary growth of pregnancy consists of an extensive multiplication of alveoli on a proliferating duct system giving rise to alveolar lobules that have largely replaced the fatty tissue of the cyclic breast. In contrast, the lactational growth is at first one of hyperplasia of the alveolar cells, not to form more alveoli, but to expand all of the existing ones; and then to control the cycle of functional growth and secretion involved in the extremely complex synthesis of milk. In our "endocrinotomized" rats, only the lactogenic actions of Mammothrophin and cortisol were necessary to accomplish this. In the organ culture work of Elias, RIVERS and others, insulin had to be added along with these two hormones to synthetic media to induce milk secretion. I should like to pay tribute to two students of the late Professor Bovin of Strasbourg, Stricker and Gruter, who announced in 1938 the discovery of a lactogenic activity in an Evans and Simpson type of extract of cattle pituitaries. Injection of these extracts into oophorectomized rabbits induced prompt milk secretion. Later in this country Professor George Corner of Rochester, and Catchpole and I, here confirmed this in virgin rabbits and



males pretreated with Estrone or Estrone plus Progesterone. After about 5 years, 3000 pigeons and over 100 trial and error purification procedures, I isolated the lactogenic proteins from the millions of bovine and ovine pituitaries made available by Dr. Evans to me and my many coworkers, Drs. Simpson, Reinhardt, Bennett, Moon, Crede, Hopper, and many others. These hormones were characterized physiochemically by Dr. C.H. Li who with his team of peptide chemists will one day synthesize several varieties of this hormone.

With purified Mammothrophin we have induced milk secretion in many experimental forms from opossums to monkeys; but most of the crucial tests had to be done in the rat. The simplest milk-secretion assay is one that I introduced for direct intramammary testing in rabbits.

Slide 27

The procedure - Pre-lactational growth is induced in virgin rabbits by giving estrone plus progesterone; and then the fraction to be tested is instilled through one of the six nipple ducts into a single sector of one or more of the rabbit's eight mammary glands. Theoretically one could perform 48 tests on one rabbit but this is not advisable because of the possibility of overlapping effects. After one instillation of as little as 25  $\mu$ g, and within 24 hours, milk may be seen through the skin; and may be readily expressed from the injected sector only.

Slide 28

Several positive reactions in the same rabbit.

Slide 29

A carmine-stained and cleared mammary spread with a positive reaction in one sector injected with 0.1 mg of ovine Mammothrophin next to a negative control sector injected with 2% butanol.

Slide 30

The histology of the prepared gland with good lobulo-alveolar growth before the instillation of Mammothrophin and the 48-hour response to 0.1 mg of the hormone showing alveoli fully distended with milk.



males pretreated with Estrone or Estrone plus Progesterone. After about 5 years, 3000 pigeons and over 100 trials and error purification procedures, I isolated the lactogenic proteins from the millions of bovine and ovine pituitaries made available by Dr. Evans to me and my many coworkers, Drs. Simpson, Reinhardt, Bennett, Moon, Grede, Hopper, and many others. These hormones were characterized physicochemically by Dr. C.H. Li who with his team of peptide chemists will one day synthesize several varieties of this hormone.

With purified Mammothrophin we have induced milk secretion in many experimental forms from opossums to monkeys; but most of the critical tests had to be done in the rat. The simplest milk-secretion assay is one that I introduced for direct intramammary testing in rabbits.

The procedure - Pre-lactational growth is induced in virgin rabbits by giving estrone plus progesterone; and then the fraction to be tested is instilled through one of the six nipple ducts into a single sector of one or more of the rabbit's eight mammary glands. Theoretically one could perform 48 tests on one rabbit but this is not advisable because of the possibility of overlapping effects. After one instillation of as little as 25  $\mu$ g, and within 24 hours, milk may be seen through the skin and may be readily expressed from the injected sector only.

Several positive reactions in the same rabbit. A carmine-stained and cleared mammary spread with a positive reaction in one sector injected with 0.1 mg of ovine Mammothrophin next to a negative control sector injected with 25 butanol.

The histology of the prepared gland with good lobulo-alveolar growth before the instillation of Mammothrophin and the 48-hour response to 0.1 mg of the hormone showing alveoli fully distended with milk.



Human Mammothrophin that I have prepared and the human and monkey preparations of both Dr. Li and Dr. Raben which they refer to as human growth hormone are lactogenic by this rabbit test; and by tests in the rat and monkey.

Slide 31      The unilateral lactogenic response in a normal cycling Java monkey given one intramammary injection of human Mammothrophin.

Slides 32, 33      The histology of the hormone injected gland and of the contralateral 2% butanol injected gland.

The preferred test for lactogenic activity is performed on 1 month old rats, with pituitary, adrenals and ovaries removed. It is necessary to inject only 25  $\mu$ g of human Mammothrophin and an equal amount of cortisol for a few days locally over one mammary gland to elicit milk secretion.

Slide 34      Positive reaction in the injected gland with the contralateral control gland unaffected.

Slide 35      Histology of this reaction.

In an attempt to quantitate these lactational responses, Dr. Bintarningsih of Indonesia worked with us on hypophysectomized rats. In those experiments, daily injections of Mammothrophin and cortisol permitted the rats to raise litters of six pups. We noted that unsupported by the other pituitary hormones, these mothers melted their own tissues down to provide milk for their offspring. And to paraphrase Carl Sandberg: "The milk in the baby's belly bubbled and got to be flesh and blood."

This was a touching display of "the parental behaviour" which Riddle and others attribute to Prolactin (i. e. Mammothrophin); but I hasten to add



male Human Mammothrophin that I have prepared and the human and monkey preparations of both Dr. L. I. and Dr. Raben which they refer to as human growth hormone are lactogenic by this rabbit test and by tests in the rat and monkey.

The unilateral lactogenic response in a normal cycling female monkey given one intramammary injection of human Mammothrophin. The histology of the hormone injected gland and of the control lateral 25 pituitary gland.

The preferred test for lactogenic activity is performed on 1 month old rats, with pituitary adenoma and ovaries removed. It is necessary to inject only 35  $\mu$ g of human Mammothrophin and an equal amount of cortisol for a few days locally over one mammary gland to elicit milk secretion.

Positive reaction in the injected gland with the contralateral control gland unaffected. Histology of this reaction.

In an attempt to quantitate these lactational responses, Dr. Binsten of Indonesia worked with us on hypophysectomized rats. In those experiments, daily injections of Mammothrophin and cortisol permitted the rats to raise litters of six pups. We noted that unsupported by the other

pituitary hormones, these mothers melted their own tissues down to provide milk for their offspring. And to paraphrase Carl Sandburg: "The milk in the baby's belly bubbled and got to be flesh and blood." This was a touching display of "the parental behaviour" which Riddle and others attribute to Prolactin (i. e. Mammothrophin); but I hasten to add



that the control mothers without pituitaries and without injections of any hormone displayed just as much solicitude. All they got in return were sore teats greatly elongated by pups sucking on dry glands.

It will be the task of the behavioural scientists to prove whether or not Mammothrophin is a parental care hormone in human beings. As a first patient I suggest this man whose picture was in Life a few years ago.

Slide 36

He successfully hatched a chicken on what would be called his "brood spot" if he were a bird. At that, I think we might classify him as a "rare bird".

Clinical attempts to improve a poor milk supply hormonally have been almost uniformly poorly planned and unrewarding. Negative results may well be ascribed to the chemical difference between ovine and human Mammothrophin. Positive results with ovine preparations in some cases may have been due to contaminating hormones such as ACTH which is not so species-specific or to suggestion. The purified ovine Mammothrophin that I prepared for the Stewart and Pratt double blind experiment at a Detroit hospital gave no better results than did the placebo. At the time I was disappointed; but was gratified later when we learned of the species difference between human and ovine Mammothrophin.

Human Mammothrophin is now available for clinical trials; but so far the main interest in it has come from a few behavioural scientists, who feel that breast feeding and a normal maternal-infant relationship should be encouraged.

With all of the hormones from the pituitary and its target-organs



that the control mothers without pituitaries and without injections of any hormones displayed just as much solicitude. All they got in return were some tests greatly elongated by pups sucking on dry glands.

It will be the task of the behavioral scientists to prove whether or not

Mammotrophin is a parental care hormone in human beings. As a first

patient I suggest this man whose picture was in Life a few years ago.

He successfully hatched a chicken on what would be called his

"brood spot" if he were a bird. At last, I think we might

classify him as a "rare bird".

Clinical attempts to improve a poor milk supply hormonally have been

almost uniformly poorly planned and unconvincing. Negative results may

well be ascribed to the chemical difference between ovine and human Mam-

motrophin. Positive results with ovine preparations in some cases may

have been due to contaminating hormones such as ACTH which is not so

species-specific or to suggestion. The purified ovine Mammotrophin that I

prepared for the Stewart and Fraut domestic blind experiment at a Detroit hos-

pital gave no better results than did the placebo. At the time I was disap-

pointed; but was gratified later when we learned of the species difference

between human and ovine Mammotrophin.

Human Mammotrophin is now available for clinical trials; but so far

the main interest in it has come from a few behavioral scientists, who feel

that breast feeding and a normal maternal-infant relationship should be

encouraged.

With all of the hormones from the pituitary and its target-organs



aiding the mother, the infant would still starve (i. e. without a pediatrician's formula) if the neuro-hormone Oxytocin were not secreted in adequate amounts to activate the rhythmically contracting tissue of the breast. This hormone now in synthetic form due to the brilliant work of De Vignaud's laboratory, is secreted as a reflex to the sucking stimulus of the infant; it travels via the blood stream to the contracting cells; and stimulates them to squeeze the milk along the breast ducts either into the baby's mouth or into space as shown in Tintoretto's famous painting "The Origin of the Milky Way".

Slide 37

Jupiter rudely snatching the infant Hercules from Juno's breast. After what I have said, I think that you will agree that many hormones are responsible for the formation of a beautiful galaxy; and also that artists of the 16th Century knew their endocrinology very well indeed. For as you will notice, Tintoretto understood that the sucking stimulus applied to one breast may result in the squirting of milk from the opposite one.

I should explain that this slide was prepared for the edification of the Senate's chairman, Professor Louis Strait, who on hearing the kind biographical sketch read by Dr. Masouredis said that it sounded as though an astronomer would be named as the Faculty Research Lecturer this year.



aiding the mother, the infant would still survive (i.e. without a pediatrician's formula) if the neuro-hormone Oxytocin were not secreted in adequate amounts to activate the rhythmically contracting tissue of the breast. This hormone now in synthetic form due to the brilliant work of Dr. Vincent's laboratory, is secreted as a reflex to the sucking stimulus of the infant; it travels via the blood stream to the contracting cells; and stimulates them to squeeze the milk along the breast ducts either into the baby's mouth or into space as shown in Tintoretto's famous painting "The Origin of the Milky Way".

Lighter readily matching the infant Hercules from John's breast. After what I have said, I think that you will agree that many hormones are responsible for the formation of a beautiful galaxy; and also that artists of the 18th Century knew their endocrinology very well indeed. For as you will notice, Tintoretto understood that the sucking stimulus applied to one breast may result in the squirting of milk from the opposite one.

I should explain that this slide was prepared for the edification of the Senate's chairman, Professor Louis Straus, who on hearing the kind biographical sketch read by Dr. Masanovich said that it sounded as though an astronomer would be named as the Faculty Research Lecturer this year.



29

History of Laguna Honda Hospital

1866 - 1964

Florence Summer, PHN  
Home Care Coordinator

Gloria Reed, PSY  
Supervising Clinical Psychologist

Rehabilitation Program, 1964







# CITY AND COUNTY OF SAN FRANCISCO

## DEPARTMENT OF PUBLIC HEALTH

### HOSPITAL

LAGUNA HONDA ~~HOSPITAL~~

375 Laguna Honda Blvd.

San Francisco 27, California

July 30, 1964

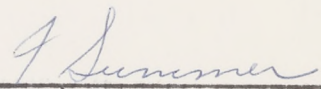
Mr. W. E. Carter  
Alumni-Faculty Association  
School of Medicine  
University of California  
San Francisco, California 94122

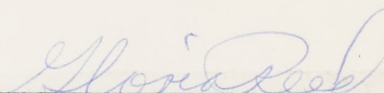
Dear Mr. Carter:

We are complimented that you wish to include the  
"History of Laguna Honda Hospital" in the seventh edition  
of "TALES & TRADITIONS."

Our consent is readily given.

Sincerely yours,

  
(Mrs.) F. Summer

  
(Miss) Gloria Reed



CITY AND COUNTY OF SAN FRANCISCO

DEPARTMENT OF PUBLIC HEALTH

HOSPITAL

1111 HONDA BLVD.

San Francisco, California

July 30, 1964

Mr. W. E. Carter  
Alumni-Faculty Association  
School of Medicine  
University of California  
San Francisco, California 94132

Dear Mr. Carter:

We are complimented that you wish to include the  
"History of Laguna Honda Hospital" in the seventh edition  
of "TALES & TRADITIONS."

Our consent is readily given.

Sincerely yours,

(Mrs.) F. Garner

(Miss) Gloria Reed



An act was approved on March 10, 1866, to establish an almshouse for the homeless and unemployed men of the City and County of San Francisco. The site chosen was on the San Miguel Ranch, an area of 80 acres on the western slope of Twin Peaks. This was adjacent to Laguna Honda, San Francisco's first large water distribution reservoir.

The almshouse opened on September 12, 1867. The roads serving the area were unpaved, one running through Sutro Forest from north to south, and the other running east to west, off Corbett Avenue. The building was wooden with three wings branching off a central building. Only three of the four floors were completed when the building was first occupied. Each floor had one bathroom. The bed capacity totaled 500 after the residents helped to complete the top floor. Nearly all of the non-medical services were performed by men in residence, under the supervision of Superintendent George Morris and a few paid personnel. There are no records of medical services for this period.

Shortly after the almshouse was opened an infirmary was established to care for the sick. This was the beginning of the hospital phase of caring for indigent persons. Records indicate that this developed into a general hospital for the care of the acute and communicable diseases and was equivalent to the present San Francisco General Hospital.

During the smallpox epidemic of 1868 a 24 bed hospital to care for these patients was opened on the almshouse grounds. It was staffed by a matron and three assistants. There were 677 cases of smallpox admitted in 1868 and 1968 cases during the first 6 months of 1869.

By 1885 the almshouse had an average of 582 residents. The cost per patient was 28 cents a day. The grounds were divided as follows: the main building area and surrounding grounds 5 acres; pastureage 15 acres; hospital grounds and roads 4 acres. The livestock consisted of 7 horses, 84 cows, 1 bull, 8 heifers, 27 calves, 21 hogs, and 58 pigs.

Hospital funds were provided in 1895 to repair and expand the almshouse buildings. By 1903 there were 224 residents who could care for themselves and 667 who could not. There were 8 nurses on duty. It was not until 1906 that the indigent sick were examined before being admitted to the institution.



An act was approved on March 10, 1866, to establish an almshouse for the homeless and unemployed men of the City and County of San Francisco. The site chosen was on the San Miguel Rancho, an area of 80 acres on the western slope of Twin Peaks. This was adjacent to Laguna Honda, San Francisco's first large water distribution reservoir.

The almshouse opened on September 12, 1867. The roads serving the area were unpaved, one running through Suro Forest from north to south, and the other running east to west, off Cortez Avenue. The building was wooden with three wings branching off a central building. Only three of the four floors were completed when the building was first occupied. Each floor had one bathroom. The bed capacity totaled 500 after the residents helped to complete the top floor. Nearly all of the non-medical services were performed by men in residence, under the supervision of Superintendent George Morris and a few paid personnel. There are no records of medical services for this period.

Shortly after the almshouse was opened an infirmary was established to care for the sick. This was the beginning of the hospital phase of caring for indigent persons. Records indicate that this developed into a general hospital for the care of the acute and communicable diseases and was equivalent to the present San Francisco General Hospital.

During the smallpox epidemic of 1888 a 34 bed hospital to care for these patients was opened on the almshouse grounds. It was staffed by a matron and three assistants. There were 677 cases of smallpox admitted in 1888 and 1988 cases during the first 6 months of 1889.

By 1885 the almshouse had an average of 582 residents. The cost per patient was 28 cents a day. The grounds were divided as follows: the main building area and surrounding grounds 5 acres; pastureage 15 acres; hospital grounds and roads 4 acres. The livestock consisted of 7 horses, 84 cows, 1 bull, 8 heifers, 27 calves, 21 pigs, and 28 pigs.

Hospital funds were provided in 1895 to repair and expand the almshouse buildings. By 1903 there were 224 residents who could care for themselves and 667 who could not. There were 8 nurses on duty. It was not until 1906 that the indigent sick were examined before being admitted to the institution.



After the fire and earthquake of 1906 a Relief Corporation was set up to care for approximately 800 homeless victims of the disaster. The grounds of the almshouse became the center to distribute relief and provide housing. The Relief Corporation spent approximately \$300,000 to build a new pavilion-type building and three additional buildings on the almshouse grounds to house 250 patients each. In addition the entire tract was fenced and a new sewer was connected to the 7th Avenue sewer. Also, a central power plant, water tanks, and garbage incinerators were installed. Construction was completed in January 1908 and at this time the name was changed to "Relief Home". This institution was for homeless men and women with a section devoted to the care of the homeless, chronically ill.

A separate building of reinforced concrete, which is still in use, was built in 1909 to be used exclusively for hospital cases. It was known as the "Old Infirmary". Today it is called Clarendon Hall.

The budget for the fiscal year 1907-1908 included: \$1507 for forage, \$629 for liquor, and \$312 for drugs. The 1911-1912 budget included: hay and grain \$6940, horseshoeing \$600, tobacco \$2950, liquor \$4760, drugs \$2100. A story is told, regarding the liquor item, that since there were no funds to pay the residents for work performed, they were paid with liquor. It is said that at the end of the day the men lined up in front of two barrels, one containing whiskey and the other wine. "Wine or whiskey?" If the wine was chosen a portion was placed in a container; if whiskey was ordered the individual was allowed to drink his portion from a cup attached to the barrel.

The men's "Last Chance Ward" for terminal cases was completed in November 1913. The beds for incontinent cases were made with holes in the mattress and sheets so that less nursing care was necessary. This type of bed was discontinued within a short time. During the same year the Superintendent of the Relief Home was authorized to have a senior medical student, without salary, to assist the Resident Physician. The following year the Police Department donated an old patrol wagon for the hospital's use. In 1919 two interns were assigned to the hospital. They rotated from San Francisco Hospital to the Relief Home.

Since most of the patients were chronically ill, the institution developed into more of a hospital than a home. Dormitories and other facilities were housed in wooden, one-story buildings. The increased need for hospital facilities led to the construction of the first sections of the



After the fire and earthquake of 1906 the Relief Corporation was set up to care for approximately 800 homeless victims of the disaster. The grounds of the almshouse became the center to distribute relief and provide housing. The Relief Corporation spent approximately \$300,000 to build a new pavilion-type building and three additional buildings on the almshouse grounds to house 250 patients each. In addition the entire tract was fenced and a new sewer was connected to the 7th Avenue sewer. Also, a central power plant, water tanks, and garbage incinerators were installed. Construction was completed in January 1908 and at this time the name was changed to "Relief Home". This institution was for homeless men and women with a section devoted to the care of the homeless, chronically ill.

A separate building of reinforced concrete, which is still in use, was built in 1909 to be used exclusively for hospital cases. It was known as the "Old Infirmary". Today it is called Clarendon Hall.

The budget for the fiscal year 1907-1908 included: \$1507 for forage, \$629 for liquor, and \$312 for drugs. The 1911-1912 budget included: hay and grain \$6940, horse-drawn \$600, tobacco \$2950, liquor \$4960, drugs \$2100. A story is told, regarding the liquor item, that since there were no funds to pay the residents for work performed, they were paid with liquor. It is said that at the end of the day the men lined up in front of two barrels, one containing whiskey and the other wine. "Wine or whiskey?" If the wine was chosen a portion was placed in a container; if whiskey was ordered the individual was allowed to drink his portion from a cup attached to the barrel.

The man's "Last Chance Ward" for terminal cases was completed in November 1913. The beds for incontinent cases were made with holes in the mattress and sheets so that less nursing care was necessary. This type of bed was discontinued within a short time. During the same year the Superintendent of the Relief Home was authorized to have a senior medical student, without salary, to assist the Resident Physician. The following year the Police Department donated an old patrol wagon for the hospital's use. In 1919 two interns were assigned to the hospital. They rotated from San Francisco Hospital to the Relief Home.

Since most of the patients were chronically ill, the institution developed into more of a hospital than a home. "Orderlies and other little" were housed in wooden, one-story buildings. The increased need for hospital facilities led to the construction of the first sections of the



present main building. These new buildings were completed in August 1926 and consisted of an administration building; six dormitory buildings, each housing 200 people; and two dormitories for 200 people with an additional ten rooms with two beds each. There was also a service building which included a butcher shop, a bakery, and a commissary. In addition, there was a men's day room, a chapel, and a dining room to seat 1,000 people. At this time the name of the institution was changed from Relief Home to the "Laguna Honda Home". Laguna Honda means "deep lake" in Spanish and was the name of the small lake in the vicinity.

The visiting staff of 34 doctors at Laguna Honda was from Stanford and the University of California. As no clinical laboratory facilities were available at Laguna Honda, the two universities paid the salary of a laboratory technician. Patients needing x-rays were sent to the San Francisco Hospital, since renamed San Francisco General Hospital.

Voters approved "Health Bonds" in November 1928 for construction of three new units at Laguna Honda -- F, K, and L Wards. The average population at Laguna Honda was 1540, of whom 500 were bed patients. The medical staff consisted of 2 resident physicians and 4 interns.

In 1930 x-ray and cardiograph facilities were provided. At this time the University of California Hospital used Laguna Honda as a teaching facility. Dr. LeRoy Briggs had the course in Physical Diagnosis for sophomore medical students transferred from San Francisco Hospital to Laguna Honda in 1932.

By 1935 about one third of the residents were hospital patients. Several of the wings were converted from ambulatory sections to hospital wings and an additional hospital wing was erected.

A bond issue and financial aid from the Federal Government's Public Works Administration provided funds for a new modern hospital wing in 1940. In this building there were suites for major surgery, x-rays, a laboratory department, and special diet laboratories.

Pressure for additional facilities began to develop about 1945. Old Age Security and Social Security had encouraged the ambulatory person to remain in his own home or other outside housing, resulting in less need for custodial or ambulatory care. Also, with further discoveries of newer medications and scientific techniques, the individual's life span continued to lengthen.



present main building. These new buildings were completed in August 1935 and consisted of an administration building; six dormitory buildings, each housing 300 people; and two dormitories for 300 people with an additional ten rooms with two beds each. There was also a service building which included a butcher shop, a bakery, and a commissary. In addition, there was a men's day room, a chapel, and a dining room for 1,000 people. At this time the name of the institution was changed from Relief Home to the "Laguna Honda Home." Laguna Honda means "deep lake" in Spanish and was the name of the small lake in the vicinity.

The visiting staff of 34 doctors at Laguna Honda was from Stanford and the University of California. As no clinical laboratory facilities were available at Laguna Honda, the two universities paid the salary of a laboratory technician. Patients needing x-rays were sent to the San Francisco Hospital, since renamed San Francisco General Hospital.

Voters approved "Health Bonds" in November 1938 for construction of three new units at Laguna Honda -- F, K, and L Wards. The average population at Laguna Honda was 1,240, of whom 500 were bed patients. The medical staff consisted of 2 resident physicians and 4 interns.

In 1930 x-ray and cardiograph facilities were provided. At this time the University of California Hospital used Laguna Honda as a teaching facility. Dr. LeRoy Briggs had the course in Physical Diagnosis for sophomore medical students transferred from San Francisco Hospital to Laguna Honda in 1932.

By 1935 about one third of the residents were hospital patients. Several of the wings were converted from ambulatory sections to hospital wings and an additional hospital wing was erected.

A bond issue and financial aid from the Federal Government's Public Works Administration provided funds for a new modern hospital wing in 1940. In this building there were suites for major surgery, x-rays, a laboratory department, and special diet laboratories.

Pressure for additional facilities began to develop about 1945. Old Age Security and Social Security had encouraged the ambulatory person to remain in his own home or other outside housing, resulting in less need for custodial or ambulatory care. Also, with further discoveries of new medications and scientific techniques, the individual's life span continued to lengthen.



Concurrent with these new factors, the need for additional hospital facilities at Laguna Honda continue .

In September 1948 Dr. H.D. Crall became Medical Superintendent at Laguna Honda and early in 1949 Mr. Louis A. Moran was appointed administrator of Laguna Honda. The medical staff at this time consisted of 6 interns, 3 each from the University of California and Stanford, who rotated from San Francisco Hospital monthly, and one assistant resident in medicine who rotated every three months. There were positions for 2 senior and one junior resident which were difficult to fill. Also, although the authorized quota for nurses was small, there were many positions available. There was a chronic shortage of funds for drugs and supplies. Medical records and files were in a deplorable condition.

Occupational Therapy consisted of a "rug room" where old materials and a few looms produced a few items for sale. In the basement there was a "basket shop", with old tubs, rattan and raffia. Old men worked as a group to make baskets to be sold to local undertakers to be used at funerals.

Physical Therapy was begun in 1950 when a two-bed ward, with a small amount of equipment, was turned over to a competent therapist. This was the beginning of the present modern physical therapy department.

A pathology laboratory was established in 1948. Prior to that time specimens were sent to Stanford or the University of California for malignancy determination. Reports were usually received several months later. When autopsies were done tissues were taken to the laboratories. Months or even years later the reports were received.

One technician and one resident worker staffed the Clinical Laboratory. The resident worker helped wash urine bottles and mopped the floor when he was sober. Interns did the routine laboratory work on the medical and surgical wards for the acutely ill. The laboratory technician was expected to do all the routine laboratory work plus special procedures for the rest of the hospital involving about 1,6000 people. She worked 6 days, and sometimes 7 days, a week but could only do a portion of the work.

The x-ray department, in 1948, consisted of a 200 milliamper diagnostic machine with an outmoded fluoroscope which was dangerous to the patient, technician and radiologist. This technician also had a resident worker for routine chores.



Concurrent with these new factors, the need for additional hospital facilities at Laguna Honda continues.

In September 1948 Dr. H.D. Grall became Medical Superintendent at Laguna Honda and early in 1949 Mr. Louis A. Moran was appointed administrator. The medical staff at this time consisted of 6 internists, each from the University of California and Stanford, who rotated from San Francisco Hospital monthly, and one assistant resident in medicine who rotated every three months. There were positions for 2 senior and one junior resident which were difficult to fill. Also, although the authorized quota for nurses was small, there were many positions available. There was a chronic shortage of funds for drugs and supplies. Medical records and files were in a deplorable condition.

Occupational Therapy consisted of a "rug room" where old materials and a few games produced a few items for sale. In the basement there was a "basket shop", with old tubs, rattan and raffia. Old men worked as a group to make baskets to be sold to local undertakers to be used at funerals.

Physical Therapy was begun in 1950 when a two-bed ward, with a small amount of equipment, was turned over to a competent therapist. This was the beginning of the present modern physical therapy department.

A pathology laboratory was established in 1948. Prior to that time specimens were sent to Stanford or the University of California for malignancy determination. Reports were usually received several months later. When autopsies were done tissues were taken to the laboratories. Months or even years later the reports were received.

On technician and one resident worker staffed the Clinical Laboratory. The resident worker helped wash and bottle and helped the floor when he was sober. Interns did the routine laboratory work on the medical and surgical wards for the acute ill. The laboratory technician was expected to do all the routine laboratory work plus special procedures for the rest of the hospital involving about 1,000 profiles. He worked 6 days, and sometimes 7 days, a week but could only do a portion of the work.

The x-ray department, in 1948, consisted of a 300 milligram diagnostic machine with an outboard fluoroscope which was dangerous to the patient, technician and radiologist. This technician also had a resident worker for routine chores.



At the time the diet department consisted of one dietician. Special diets were available in limited quantities in the hospital section for a few ambulatory patients in a small dining room. It was often necessary to keep a patient in the hospital to be sure that he received a proper diet.

A very interesting project at Laguna Honda at this time was the Laboratory of Experimental Oncology. This was an integrated research unit for the study of clinical and laboratory problems of the cancer patients. Financial support came from the National Cancer Institute and was supplemented by funds from the University of California Medical School and the Damon Runyan Fund. Research covered four areas: experimental therapy, physiology, biology, and the study of the protein fractions of cancer and normal tissues of the human body. Cases beyond help from standard or radiological procedures were referred to the laboratory by the Tumor Board of the University of California School of Medicine and were hospitalized in the fifteen-bed ward. Dr. Michael Shimkin was in charge of the program; Dr. Howard Bierman was in charge of the clinical section. In 1953, because of the lack of necessary funds, the patients and personnel were transferred to Bethesda, Maryland. Some ward space was retained until June 1954 to complete laboratory and non-clinical work. The laboratory was a unit, not under the control of the city, which paid for their patients at the current rate at Laguna Honda of \$2.82 to \$4.40 a day. Additionally, they had agreed to provide a pathology service for Laguna Honda. However, in the beginning the expenses of the pathology laboratory were paid by the University of California. Later token payments were made by the Cancer Institute and finally the city took over this very essential service.

The autopsy rate at Laguna Honda prior to the opening of the Laboratory of Experimental Oncology had been 12%, and the year prior to that 5%. After this unit was instituted the rate rose to 33%. As a result of the pathology service there was a much needed stimulus to the intern teaching program and thus improved patient care.

Because of the availability of the pathology service, surgery, which had been performed at Laguna Honda by visiting staff or by Presidents, received new impetus. During 1951, the last year that surgery was done at Laguna Honda, 140 major operations and over 500 minor operations were performed with excellent results.



At the time the diet department consisted of one dietitian. Special diets were available in limited quantities in the hospital section for a few ambulatory patients in a small dining room. It was often necessary to keep a patient in the hospital to be sure that he received a proper diet.

A very interesting project at Laguna Honda at this time was the laboratory of Experimental Oncology. This was an integrated research unit for the study of clinical and laboratory problems of the cancer patient. Financial support came from the National Cancer Institute and was supplemented by funds from the University of California Medical School and the Hiram Buxton Fund. Research covered four areas: experimental therapy, physiology, biology, and the study of the protein fractions of cancer and normal tissues of the human body. Cases beyond help from standard or radiological procedures were referred to the laboratory by the "Joint Board of the University of California School of Medicine and were hospitalized in the fifteen-bed ward. Dr. Michael Shitka was in charge of the program; Dr. Howard Sherman was in charge of the clinical section. In 1953, because of the lack of necessary funds, the patients and personnel were transferred to Bethesda, Maryland. Some ward space was retained until June 1954 to complete laboratory and non-clinical work. The laboratory was a unit, not under the control of the city, which paid for their patients at the current rate at Laguna Honda of \$2.82 to \$4.40 a day. Additionally, they had agreed to provide a pathology service for Laguna Honda. However, in the beginning the expenses of the pathology laboratory were paid by the University of California. Later token payments were made by the Cancer Institute and finally the city took over this very essential service.

The salary rate at Laguna Honda prior to the opening of the laboratory of Experimental Oncology had been 12%, and the year prior to that 5%, after this unit was instituted the rate rose to 15%, as a result of the pathology service there was a much needed stimulus to the intern teaching program and thus improved patient care.

Because of the availability of the pathology service, surgery, which had been performed at Laguna Honda by visiting staff or by residents, received new impetus. During 1951, the last year that surgery was done at Laguna Honda, 140 major operations and over 500 minor operations were performed with excellent results.



Miss Virginia Leishman became Director of Nurses in 1953. After many years of constant effort, there had been a gradual increase in the number of registered nurses, licenses vocational nurses, and orderlies. There is now sufficient personnel to provide at least 1.6 hours of nursing care per patient each day.

A bond issue of \$5,000,000 for the modernization of Laguna Honda was approved in 1954 and work was started in 1955. The various projects were completed as follows: the kitchen, bakery, and service units were finished in 1956, Claredon Hall in 1958, and Wards D and G in 1959. This gave the hospital eight wards which had formerly been part of the home.

Dr. Arthur O. Stone became Medical Superintendant on October 19, 1960. During that year Wards K, F, E, and L were modernized. Also, there were the following improvements: a parking lot for cars of employees and visitors; walkways between O, K, and L buildings, which provided better access to these wards, and lateral evacuation from upper wards in case of fire; modernization of the clinical laboratory and central supply. A new diet kitchen was constructed and a diet dining room established in the patients' main dining room, where special diets are provided for all ambulatory patients.

At about the time that these physical changes were being made at Laguna Honda, a retired manufacturer, Mr. Gerald Simon, visited the home one day and since then has been a motivating force behind the Volunteers of Laguna Honda Hospital. This organization has performed an outstanding service to the hospital and to the community. They have provided new interests for older people, have secured funds and equipment, and have rendered many hours of unselfish service.

Since January 1961 the California State Department of Social Welfare has been empowered to pay for in-patient rehabilitation care at the facilities which meet the exacting standards developed by the State Department of Public Health. All hospital services and necessary equipment for restoring eligible disabled persons to maximum possible functioning are included.

Meeting these standards involved obtaining space, equipment, supplies, and recruiting qualified personnel. This required a great deal of planning and hard work on the part of the staff at Laguna Honda Hospital, many local and state agencies, and numerous public-spirited individuals. In July of 1962 the Intensive Rehabilitation Center was certified by the State Department







of Public Health for 30 beds on a temporary basis. On October 1, 1962, the State Department of Social Welfare gave its approval, thus enabling the Comptroller of San Francisco to release the necessary funds. In April 1963, 45 patients were on Intensive Rehabilitation; by that summer there were 60. The number has now risen to 73. Recently the program obtained certification for 3 years.

The equipment necessary for such a program ranges from special beds, electric food and tray carts, parallel bars and canes and crutches to a 900 pound laundry washer, typewriters, and time cards. The personnel includes physicians, a psychologist, social workers, nurses, occupational therapists, physical therapists, a speech therapist, licensed vocational nurses, laboratory technicians, kitchen helpers, porters, engineers, a barber, and a beautician. Not only is there an unusually high staff-to-patient ratio, but the qualifications for staff are also very high; many of the positions require advanced college degrees and/or considerable training and experience.

Why all the trouble and expense? Because prompt and thorough treatment is vital. Experience has shown that intensive care and treatment during the early stages of convalescence can prevent further impairment and hasten return home. It is pointless to help a sick person past a major crisis and then leave him severely handicapped, and it is both expensive and cruel to relegate him to a lifetime of hospitalization when he could be helped to live in the community once more.

Laguna Honda Hospital Intensive Rehabilitation patients are, predominantly, over 60 years of age. There are, however, many younger adults and even a few stiplings to keep things lively. Strokes, amputations, bone and joint disabilities, cerebral palsy, multiple sclerosis, and spinal cord damage afflict all age groups. A few months of special training in gait, speech, activities of daily living, and use of prothoses and other assistive devices have enabled many such patients to regain lost skills and resume "Living".

Hospitals, doctors, and private agencies may refer madically suitable candidates. Preliminary screening is done by the Social Service Department of San Francisco General Hospital. Actual eligibility depentds upon financial status. Under the terms of the written agreement between the City and County of San Francisco and the state of California for reimbursement of costs, only those patients meeting the requirements for O.A.S., A.T.D.,



at Public Health for 30 beds on a temporary basis. On October 1, 1963, the State Department of Social Welfare gave the approval, thus enabling the Comptroller of San Francisco to release the necessary funds. In April 1963, 45 patients were on Intensive Rehabilitation; by that summer there were 60. The number has now risen to 75. Recently the program obtained certification for 3 years.

The equipment necessary for such a program ranges from special beds, electric food and tray carts, parallel bars and canes to a 900 pound laundry washer, typewriters, and time cards. The personnel includes physicians, a psychologist, social workers, nurses, occupational therapists, physical therapists, a speech therapist, licensed vocational nurses, laboratory technicians, kitchen helpers, porters, engineers, a barber, and a beautician. Not only is there an unusually high staff-to-patient ratio, but the qualifications for staff are also very high; many of the positions require advanced college degrees and/or considerable training and experience.

Why all the trouble and expense? Because prompt and thorough treatment is vital. Experience has shown that intensive care and treatment during the early stages of convalescence can prevent further impairment and hasten return home. It is pointless to help a sick person pass a major crisis and then leave him severely handicapped, and it is both expensive and cruel to relegate him to a lifetime of hospitalization when he could be helped to live in the community once more.

Laurens Honda Hospital Intensive Rehabilitation patients are, predominantly, over 60 years of age. There are, however, many younger adults and even a few children to keep things lively. Strokes, amputations, bone and joint disabilities, cerebral palsy, multiple sclerosis, and spinal cord damage afflict all age groups. A few months of special training in gait, speech, activities of daily living, and use of prostheses and other assistive devices have enabled many such patients to regain lost skills and resume "living".

Hospitals, doctors, and private agencies may refer patients suitably and- idates. Preliminary screening is done by the Social Service Department of San Francisco General Hospital. Actual eligibility depends upon financial status. Under the terms of the written agreement between the City and County of San Francisco and the state of California for reimbursement of costs, only those patients meeting the requirements for S.A.S., A.T.D.,



M.A.A., -- or able to afford the approximately \$35 daily cost -- can be considered for Intensive Rehabilitation. (Medically eligible but financially ineligible patients do, however, receive the benefit of Laguna Honda's regular rehabilitation services.) They must also give evidence of ability to receive maximum benefit within 3 to 6 months.

Since the Intensive Program is concerned with the "total patient" and not just his medical problems, provision has been made for help in coping with both present difficulties and with post-hospital adjustment. When necessary, suitable housing may be planned. Referral to psychiatric, health, vocational, recreation, social and family service agencies is sometimes made. Training in patient care is given to relatives. Just as the patient benefits from early training in self-care and early work in solving his own difficulties, so his family may profit from early involvement in any on-going physical care that he requires. Often this means radically improved morale, a realization that his family doesn't regard him as a hopeless burden or expense. Sometimes it appreciably hastens return home. It also gives the family the security that comes from understanding. Medical terminology then describes a curable condition instead of bewildering an already worried family. Ability to handle routines smoothly minimizes emergencies. Good daily care can postpone or even eliminate re-hospitalization. Of the "graduates" returned to the community, 87% are still living outside the hospital.

All wards at Laguna Honda were licensed as modified hospital wards in 1961 and the institution was accredited as a hospital in July of 1963.



M.A.A., -- or able to afford the approximately \$35 daily cost -- can be considered for Intensive Rehabilitation. (Medically eligible but financially ineligible patients do, however, receive the benefit of Laguna Honda's regular rehabilitation services.) They must also give evidence of ability to receive maximum benefit within 3 to 6 months.

Since the Intensive Program is concerned with the "total patient" and not just his medical problems, provision has been made for help in coping with both present difficulties and with post-hospital adjustment. When necessary, suitable housing may be planned. Referral to psychiatric, health, vocational, recreation, social and family service agencies is sometimes made. Training in patient care is given to relatives. Just as the patient benefits from early training in self-care and early work in solving his own difficulties, so his family may profit from early involvement in any on-going physical care that he requires. Often this means radically improved morale, a realization that his family doesn't regard him as a hopeless burden or expense. Some times it appreciably hastens return home. It also gives the family the security that comes from understanding. Medical terminology then disappears as a curable condition instead of bewildering an already worried family. Ability to handle routines smoothly minimizes emergencies. Good daily care can post-pone or even eliminate re-hospitalization. Of the "graduates" returned to the community, 87% are still living outside the hospital.

All wards at Laguna Honda were licensed as modified hospital wards in 1961 and the institution was accredited as a hospital in July of 1963.



## BIBLIOGRAPHY REPORT

Board of Health - Proceedings

California State Board of Medical Examiners - 1961 Directory

Crall, M. D. Herbert D. - Historical Notes

Department of Public Health - 1938 Report

"Dr. J. C. Geiger" - by Max Marshall

Municipal Records City and County of San Francisco

San Francisco County Medical Society - Bulletins

San Francisco Department of Public Health - Historical File

San Francisco General Hospital - Historical File

San Francisco Hospital and Laguna Honda Home - Annual Reports

San Francisco Polyclinic - Records

University of California Medical School - Bulletin

Dr. W. C. Van De Venter - 1936 Report

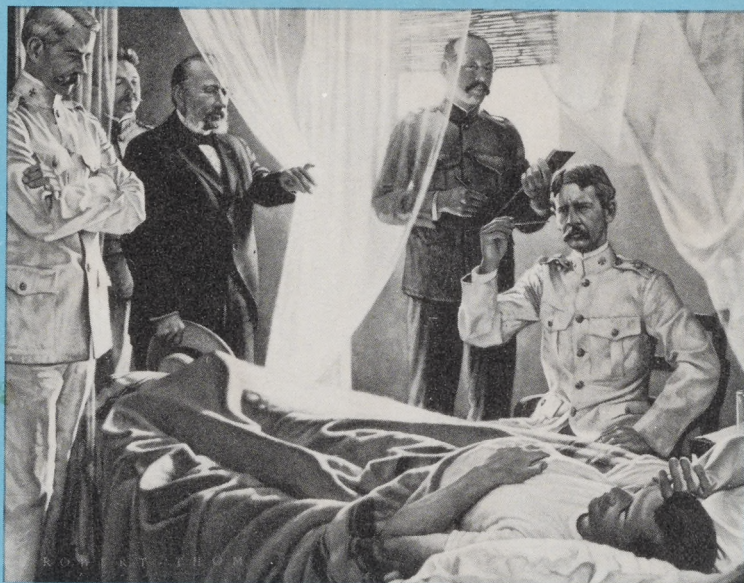
Pacific News: October 18, 1849



BIBLIOGRAPHY REPORT

- Board of Health - Proceedings
- California State Board of Medical Examiners - 1961 Directory
- Crilly, M. D. Herbert D. - Historical Note
- Department of Public Health - 1958 Report
- Dr. J. C. Galt - by Max Marshall
- San Francisco City and County of San Francisco
- San Francisco County Medical Society - Bulletin
- San Francisco Department of Public Health - Historical File
- San Francisco General Hospital - Historical File
- San Francisco Hospital and Laguna Honda Home - Annual Reports
- San Francisco Polytechnic - Records
- University of California Medical School - Bulletin
- Dr. W. C. Van De Venster - 1958 Report
- Public News October 18, 1949





A HISTORY  
of  
MEDICINE  
*In Pictures*

*Presented by* PARKE, DAVIS & COMPANY



### About the Author and the Artist

The series, *A History of Medicine In Pictures*, was conceived by George A. Bender. Directing the project from its beginning, in 1954, Mr. Bender also wrote the historical articles which accompany reproductions of the paintings by Robert A. Thom. Born at Osseo, Wisconsin, September 26, 1904, Mr. Bender grew up in Webster, South Dakota. He graduated from the Division of Pharmacy of South Dakota State College in 1923. Philadelphia College of Pharmacy and Science conferred the honorary degree, Master in Pharmacy, upon Mr. Bender in 1945; and in 1958, South Dakota State College conferred upon him the honorary degree, Doctor of Science. Mr. Bender joined Parke, Davis & Company in Detroit in 1947, and, in 1958, was appointed Parke-Davis' Director of Institutional Advertising. He lives in Grosse Pointe Park, Michigan.

Robert A. Thom, the artist who collaborated with George A. Bender in research for and painting of the original oils in the series, *A History of Medicine In Pictures*, was born March 4, 1915, in Grand Rapids, Michigan. Graduating from Port Huron (Michigan) High School in 1932, he received further training at the Institute of Fine Arts in Columbus, Ohio, and under Robert Brackmann, at Noank, Connecticut. Mr. Thom's services to Parke-Davis led to a commission, in 1948, to paint 40 original oil paintings in an earlier series, *A History of Pharmacy In Pictures*. He is a member of the New York Society of Illustrators, of the Scarab Club of Detroit, and a founder and former president of the Bloomfield Hills Art Association. He lives in Birmingham, Michigan.



A HISTORY  
of  
MEDICINE

*In Pictures*

*This exhibit in the  
Boyer of Millberry Union  
June 1 to 7, 1963 attract-  
ed much interest and  
comment*

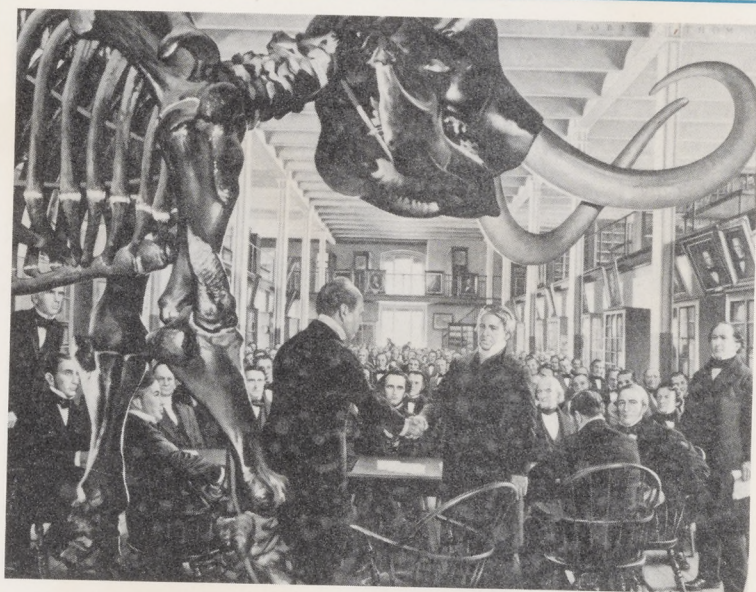
*Historically it is  
authentic  
It deserves recognition*



## Introduction

The original paintings reproduced herein are part of a continuing series planned to immortalize pictorially highlights in the history of Medicine from antiquity to the present day. Forty-five pictures will be included in the completed series to portray Medicine's heritage. Reproductions of the paintings in full color, and historical articles, are published regularly in the pages of *Therapeutic Notes*. This project has been undertaken by Parke, Davis & Company as a service in behalf of the profession of Medicine. Director and author of the project is George A. Bender. The paintings are by the internationally known artist, Robert A. Thom. Intensive research and assistance of expert advisors contribute to the accuracy and authenticity of the paintings and the accompanying historical articles.





## THE AMERICAN MEDICAL ASSOCIATION

ADVANCEMENT of medical knowledge, improved medical education, launching of a program of medical ethics, and furtherance of public service—these were aims of The American Medical Association, organized May 7, 1847, by 250 delegates seated among exhibit cases and before ancient bones of a mastodon, *Mammuth americanum*, in the hall of The Academy of Natural Sciences of Philadelphia, Pennsylvania. Chairman Jonathan Knight welcomed Dr. Nathaniel Chapman, first president, and officers (foreground) as, after years of “pains, jealousies, and love,” they launched what became one of the world’s larger and greater medical bodies, now in its second century of service both to the public and to the profession.





### CONQUERORS OF PAIN

BEFORE a skeptical group of surgeons in the operating amphitheatre of Massachusetts General Hospital, October 16, 1846, William T. G. Morton, Boston dentist, prepared to anesthetize Dr. John C. Warren's surgical patient, Gilbert Abbott, by causing him to inhale ether. Though Crawford W. Long, Georgia physician, had used ether for anesthesia in 1842, and Horace Wells, Connecticut dentist, tried unsuccessfully to demonstrate anesthesia with nitrous oxide in 1845, reports of painless operations resulting from Morton's methods gave practical anesthesia to mankind. Within a year, ether was being used in many hospitals world-wide to conquer pain incident to surgical operations.

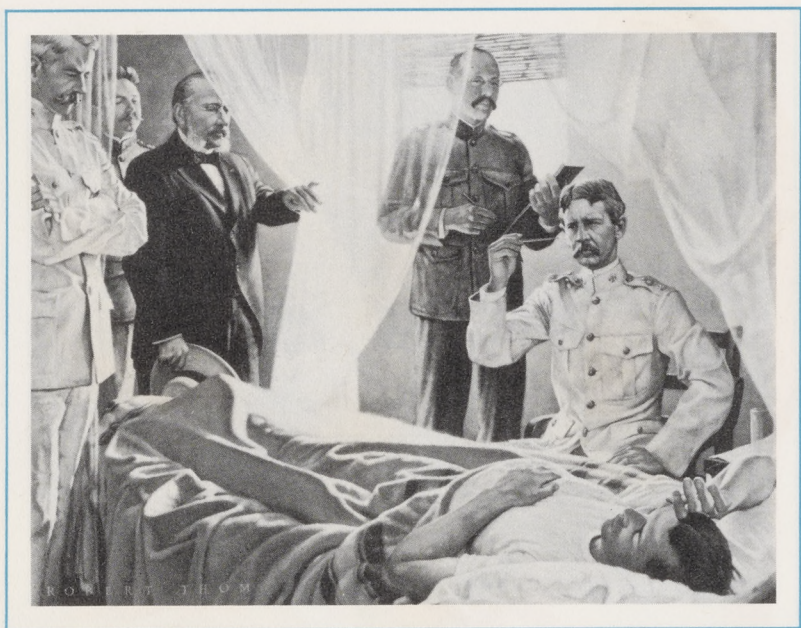




### EHRlich: CHEMOTHERAPY IS LAUNCHED

IN HIS crowded laboratory at Frankfurt's Institute of Experimental Therapy, German research scientist Paul Ehrlich (1854-1915) habitually scrawled work orders to associates with stubby colored pencils on "blocks" of note paper. Dr. Ehrlich and his Japanese assistant, Dr. Sahachiro Hata, announced Salvarsan (606) to the world in 1910 as a "chemical bullet" for treatment of syphilis. Dr. Ehrlich's success with chemical synthesis gave impetus to a new medical science, chemotherapy. Though his greatest achievements were in this field, Dr. Ehrlich contributed to many branches of medicine and shared in a 1908 Nobel Prize for his work on immunology.





## THE CONQUEST OF YELLOW FEVER

METHODS of controlling and preventing yellow fever resulted from investigations conducted in 1900 at Camp Lazear, Cuba, by a United States Army Commission led by Major Walter Reed (1851-1902). This research proved conclusively that mosquitoes carry the yellow fever virus from person to person. First volunteer patient to be infected by mosquito bites was Private John Kissinger. Examining physicians were Major W. C. Gorgas, Havana sanitation officer; Dr. A. Agramonte, pathologist; Dr. Carlos J. Finlay, chairman of the cooperating Cuban Yellow Fever Commission and first man to point to the possible infective role of mosquitoes; Dr. James Carroll, bacteriologist; and Dr. Reed, commission chairman.





### HELMHOLTZ: PHYSICIST-PHYSICIAN

AMONG great contributions to medicine in the nineteenth century was the ophthalmoscope, an instrument used for inspection of the interior of the eye, invented in 1850 by Hermann Ludwig Ferdinand von Helmholtz (1821-1894), Professor of Physiology at Königsberg. Physician by training and teacher by profession, Helmholtz became Germany's foremost physicist, succeeding to the Chair of Physics at the University of Berlin. His contributions to medicine's knowledge of acoustics nearly equaled those he made to physiologic optics. His discoveries in physics advanced knowledge in a dozen scientific fields, earned him ennoblement, and brought him eminence, distinction, and world-wide recognition during his life.





### BERNARD: PHYSIOLOGIC EXPLORER

THE ONLY PLACE where Claude Bernard (1813-1878) felt at home, outside experimental laboratories, was at the provincial farm near Saint-Julien (Rhône), France, where he was born. Bernard's great skill at dissection and at observation gave medical science benefit of outstanding physiologic discoveries concerning pancreatic secretions, animal sugar, poisons, and vasomotor nerves. He held professorships in physiology at leading Paris schools; he was awarded national and international scientific honors; but his great book, *An Introduction to the Study of Experimental Medicine*, was written at his old farm home to which he returned to recuperate from recurrent attacks of illness.





### LISTER INTRODUCES ANTISEPSIS

WHEN Surgeon Joseph Lister (1827-1912) of Glasgow Royal Infirmary removed dressings from James Greenlees' compound fracture, he found the wound had healed without infection—something unheard of before. For six weeks, beginning August 12, 1865, Lister had treated the boy's wound with carbolic acid. Now, Lister had proof of success of his principle of antiseptics—which was to revolutionize principles of wound care and to open new vistas in practice of surgery, of medicine, and of environmental sanitation. Hospitals were turned from houses of horror to houses of healing; countless lives were saved.





### “THE HOPKINS” AND MEDICAL EDUCATION

SUCCESS of The Johns Hopkins University School of Medicine, opened in Baltimore, Maryland, in 1893, stemmed from policies developed at meetings of the Faculty of Medicine and its advisors during formative years. The School, with cooperation of The Johns Hopkins Hospital, was to become world renowned for emphasis on research, for high admission standards, and for innovations in medical training. These advanced teaching methods influenced a revolution in medical education, led to higher requirements for medical licensure, brought about closure of many substandard schools of medicine, and helped raise the status of medicine in the United States to a position of true world leadership.





### JAMES LIND: CONQUEROR OF SCURVY

SURGEON of Britain's Royal Navy aboard *H. M. S. Salisbury*, in the English channel in 1747, James Lind conducted a series of clinical experiments that definitely proved citrus fruits or their juices would cure scurvy, dread dietary-deficiency disease that killed a million seamen between 1600 and 1800. Dr. Lind's work, at sea, in Edinburgh, and at Haslar Naval Hospital, plus his three books, on scurvy, on care of sailors' health, and on tropical diseases, had much to do with reforming naval health practices, saving lives both on sea and land, and shaping destinies of nations.





### LAVOISIER: OXYGEN AND RESPIRATION

GREATEST contribution of science to Medicine during the eighteenth century came from experiments relating to the processes of respiration, conducted between 1789 and 1792 by the Parisian chemist, Antoine Laurent Lavoisier, in his laboratory at the Royal Arsenal. Mme. Lavoisier was his closest collaborator. Together with a young assistant, Séguin, Lavoisier recorded oxygen intake and carbon dioxide exhalation by a man while resting, while working, and while eating. Lavoisier made many scientific, social, economic, financial, and political contributions before French revolutionary radicals executed him in 1794.





### LEEUVENHOEK AND "LITTLE ANIMALS"

ANTONY van LEEUVENHOEK, draper of seventeenth-century Delft, Holland, in his spare time retired to his "closet" to observe the wonders of the microscopic world through tiny lenses he laboriously ground and mounted. He was first to report having seen "animalcules"—protozoa and bacteria—and to confirm by direct observation circulation of the blood. Though 200 years elapsed before practical application of his discoveries contributed to medicine, his work laid the foundation for modern medicine's tremendous century-long onslaught against diseases caused by bacteria and other microbiologic entities—a campaign which has resulted in saving of millions of lives.





## MORGAGNI AND PATHOLOGIC ANATOMY

IN THE famous anatomic amphitheatre built in 1590, Giovanni Battista Morgagni (1682-1771) demonstrated before medical students from many countries during the 56 years he served as Professor of Anatomy at the University of Padua, Italy. Although his first book was published in 1704, Morgagni's greatest contribution to medicine, *On the Seats and Causes of Disease*, came out 57 years later, in 1761. This five-book work, embodying a lifetime's experience in dissection and in observation, convinced medical men that diseases were not dispersed generally throughout the body, but got their start locally in specific organs or tissues.





## PRIMITIVE MEDICINE

PRIMITIVE medicine is timeless. It is as old as the cave dweller, yet in many remote parts of the world its practice is as new as today. The sand-painting ceremonies of American Navaho Indians are unusually beautiful examples of primitive medicine, embodying all its elements—physio- and psychotherapy, religion, magic, singing, and drug lore. In a medicine “hogan,” family and friends join in the Mountain Chant’s nine-day ceremonies, in which this sand painting has an important part. The “singer” (medicine man) sings, prays, and manipulates magico-religious artifacts. Herb preparations given the patient are shared by the “singer” and the spectators too in this primitive rite.





### CANNON: PHYSIOLOGIC INVESTIGATOR

WHILE a first year student at Harvard Medical School, Boston, in 1896, Walter Bradford Cannon (1871-1945) employed newly discovered x-rays to study activities of digestive organs in animals. Preferring cats, Cannon induced them to eat radiopaque meals, and followed food through alimentary organs with the aid of a fluoroscopic screen. Basic studies of digestion, and of effects of emotions on it, led to new understandings of food utilization, of transmission of nerve impulses, and of actions of endocrine glands. Second Professor of Physiology at Harvard, Dr. Cannon earned world-wide respect as a researcher, as a teacher, and as an ambassador of scientific good will.





## MEDIEVAL HOSPITALS

THE Great Room of the Poor (*La Grand' Chambre des Povres*) is believed to be the world's oldest edifice to have been in continuous use as a hospital. Representative of medieval hospitals, it is a part of the Hôtel-Dieu of Beaune, France, founded in 1443. Combined with modern professional hospital service, it carefully preserves the atmosphere of the fifteenth century. Sisters of the Congregation of Sainte Marthe, garbed in habits traditional to their ancient order, have cared for the sick, the aged, and the indigent in this hospital for more than five hundred years, uninterrupted by wars, by economic upheavals, or by political changes.





## GALEN: INFLUENCE FOR 45 GENERATIONS

GALEN was a pillar of medicine; the last important pillar in the millennium of Greek domination of the medical world. Physician to emperors as well as commoners in the Roman empire, Galen (130-200 A.D.) traveled extensively, lectured widely, wrote prolifically. The great Greek was a shrewd observer who gained much experience through experimentation. Cupping was among the forms of treatment which he advocated. Pharmacy as well as medicine benefited from his formulas, called "galenicals;" he was a leader in the health sciences of his day. Galen's teachings were accepted as dogma by Medicine for fifteen hundred years.





### PASTEUR: MEDICINE IS TRANSFORMED

PROOF that microbes are reproduced from parent organisms, and do not result from spontaneous generation came from careful experiments in makeshift laboratories of France's famed chemist and biologist, Louis Pasteur (1822-1895), at Ecole Normale, Paris. Mme. Pasteur waits patiently for him to complete an observation. From basic work begun in these laboratories came proof of the germ theory of disease, which transformed medical practice; vaccines for virulent diseases, including anthrax and rabies; solution of many industrial biochemical problems; and founding of the famed Pasteur Institute.





### CHARCOT: MASTER OF NEUROLOGY

GREATEST neurologist of the 19th century, Parisian physician Jean-Martin Charcot (1825-1893) developed La Salpêtrière from an asylum for indigent women to one of France's leading hospitals. Charcot's study and care of its vast patient population led to teaching, research, and the creation of the world's leading neurological clinic; attracted students from many nations; raised neurology to a respected medical science. Some of Charcot's teachings inspired Sigmund Freud of Vienna (Charcot's student, 1885-1886) to develop the world-famous Freudian hypothesis on psychoanalysis and psychotherapy.

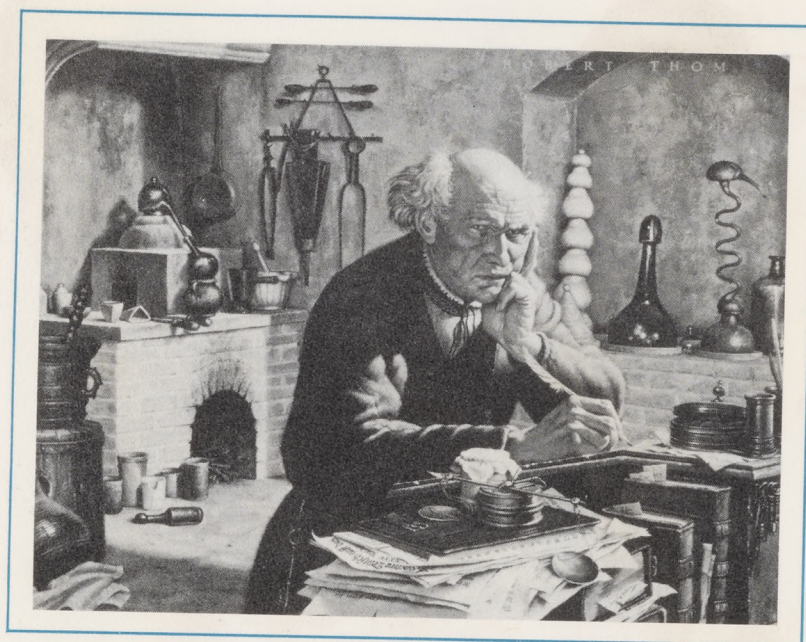




## PARÉ: SURGERY ACQUIRES STATURE

AMBROISE PARÉ, young French army surgeon with troops of King Francois at Turin, in 1536, had his first experience treating men for arquebus wounds. Running out of boiling oil (traditional treatment for gunshot injuries), he improvised, discovered that unburned patients healed much better, and resolved never to use hot oil again. It was some years later, in 1552, that Paré put aside cautery irons used to stop bleeding in amputations and reintroduced ligatures for tying blood vessels. During his life (1510-1590), practical, inventive, observant, compassionate Paré served as surgeon to four French kings; earned the title: "Father of Surgery."





## PARACELSUS: MEDICINE'S STORMY PETREL

IN THE Renaissance “chemical kitchens” of Theophrastus Bombastus von Hohenheim (1493-1541), who boastfully called himself Paracelsus, many things were brewed: chemicals, polypharmaceutical mixtures, serious medical writings—and vitriolic, abusive attacks upon medical colleagues, religionists, and political officials. Swiss-born Paracelsus’ controversies forced him to travel widely, move frequently. Labeled genius by some, quack by others, his medical efforts got results, and patients liked him. He attacked medieval “sacred cows,” Galen and Avicenna, helped turn medicine from them to rational research, and he advocated use of chemicals in medicine.

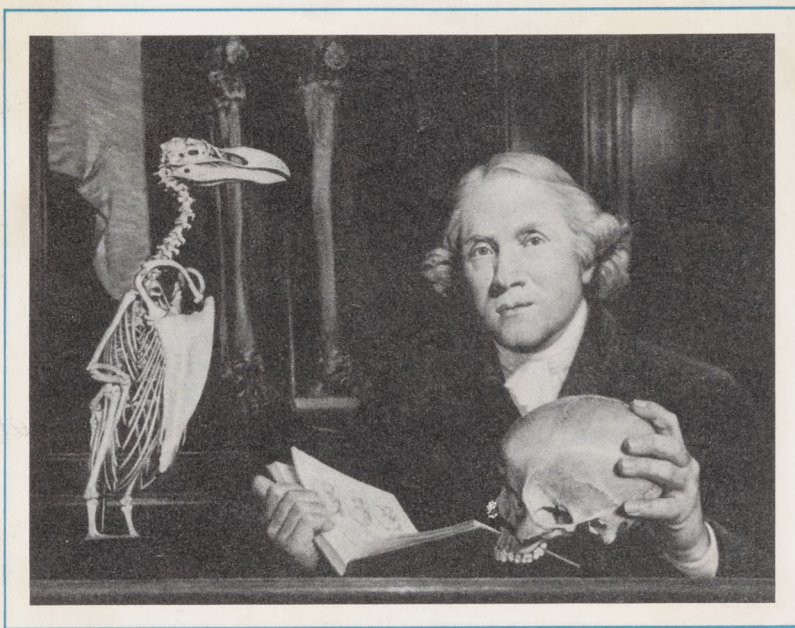




### PINEL UNCHAINS THE INSANE

THE Father of Psychiatry, French physician Philippe Pinel, in 1795 ordered chains and fetters removed from insane women in the Salpêtrière, large Parisian hospital. Two years earlier, he had similarly unchained insane men in the Bicêtre. Despite political and medical opposition and uncertainties of the French Revolution, Pinel persisted in replacing cruelty and inhumanity with kindness, understanding, and rational therapy. His success in curing and relieving patients suffering from mental diseases opened new perspectives for psychiatric research and practice.

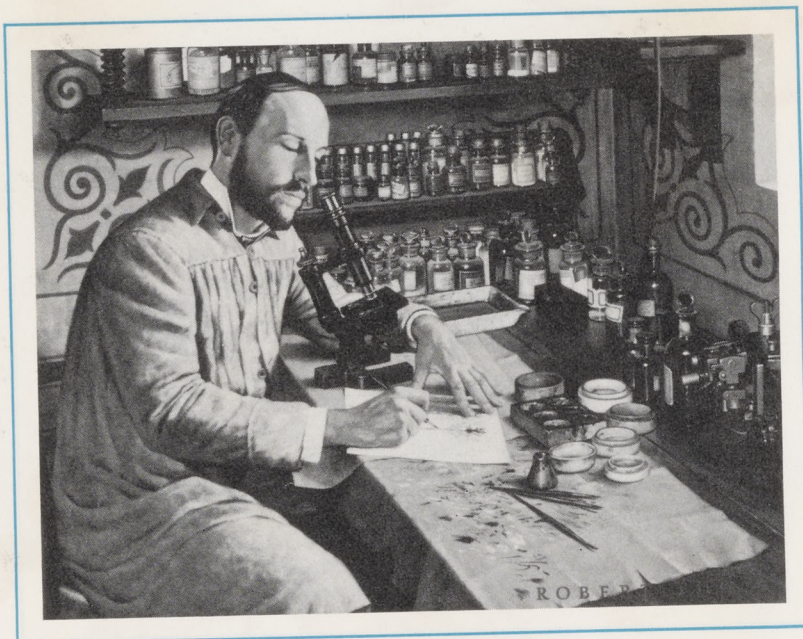




### HUNTER: SCIENTIFIC SURGERY BEGINS

FROM an untutored Scottish country boy, John Hunter (1728-1793) became eighteenth-century London's foremost surgeon and medical scientist. Combining natural talent, insatiable curiosity, and keen observation, he was one of the greatest comparative anatomists of all time. The skeletons of the now-extinct Great Auk and of the Irish Giant are two of 13,682 specimens which comprised his famous collections, war-spared remnants of which are in London's Royal College of Surgeons. Posthumously, Dr. Hunter was honored as "The Founder of Scientific Surgery."

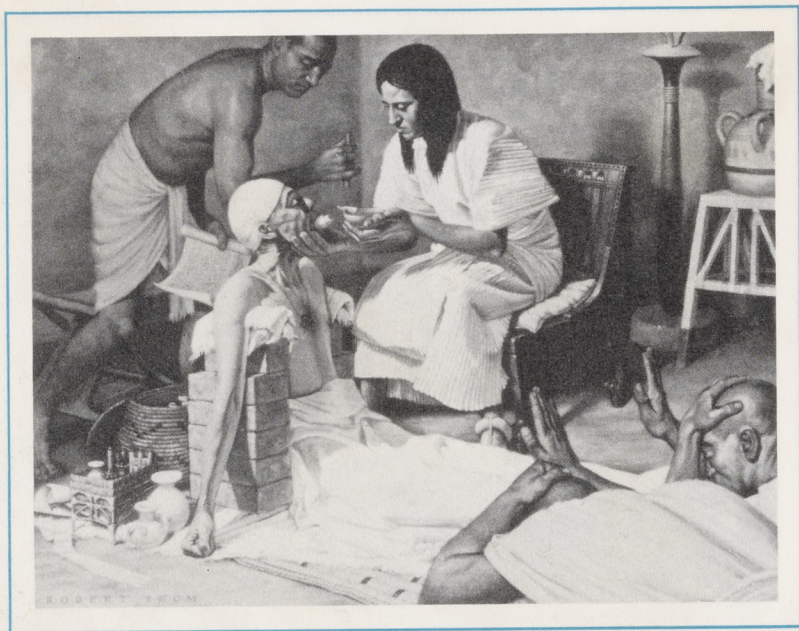




### RAMÓN Y CAJAL: NEUROANATOMIST

BOYHOOD teachers were positive that no good would come from backward, headstrong Santiago Ramón y Cajal (1852-1934), but the country surgeon's son was destined to become Spain's leading medical scientist and a world-renowned neuroanatomist. His contributions to neurology and to psychiatry began in a crowded laboratory in Barcelona. For forty years, Ramón y Cajal combined insatiable scientific curiosity, inventiveness that resulted in new stains for sections under his microscope, intensive observation, and inborn artistic ability, to reveal a wealth of new anatomical and functional facts about the nervous system, and about disorders affecting it. He received the Nobel Prize in medicine in 1906.





### MEDICINE IN ANCIENT EGYPT

AN Egyptian physician of the Eighteenth Dynasty (1500-1400 B.C.), clothed in clean white linen and a wig, as became the dignity of his status, is confronted with a patient having symptoms of lockjaw (described in an ancient scroll now known as the Edwin Smith papyrus). With sure, sympathetic hands, the physician treats the patient, who is supported by a "brick chair." Directions for treatment appear on the scroll held by his assistant. Specially trained priests observe prescribed magico-religious rites. Egyptian medicine occupied a dominant position in the world of the ancients for 2500 years.





### RUSH: PHYSICIAN, PEDANT, PATRIOT

PROFESSIONAL, moral, and physical courage of Dr. Benjamin Rush (1745-1813) was taxed to exhaustion during the 1793 yellow fever epidemic in Philadelphia, capital of the new United States of America. Those residents who could, fled; those who could not were decimated by disease. Horror and hysteria reigned. Hundreds died daily. Dr. Rush stayed, cared for patients, personally survived two attacks of fever. Though his heroic treatments were severely criticized, Rush was unswerving. Patriot, signer of the Declaration of Independence, leader in the country's first medical school, Rush became the new nation's first great physician.





### JENNER: SMALLPOX IS STEMMED

THE first vaccination against smallpox was performed by Edward Jenner, English rural physician, in his apartment in the Chantry House, Berkeley, Gloucestershire. Exudate from a cowpox pustule on the hand of dairymaid Sarah Nelmes was inserted into scratches on the arm of eight-year-old James Phipps, May 14, 1796. The vaccination was effective, for two later attempts to induce infection with smallpox were unsuccessful. Proving and reproofing his discovery, Jenner published his vaccination findings in 1798. Despite opposition, vaccination became accepted practice during Jenner's lifetime.

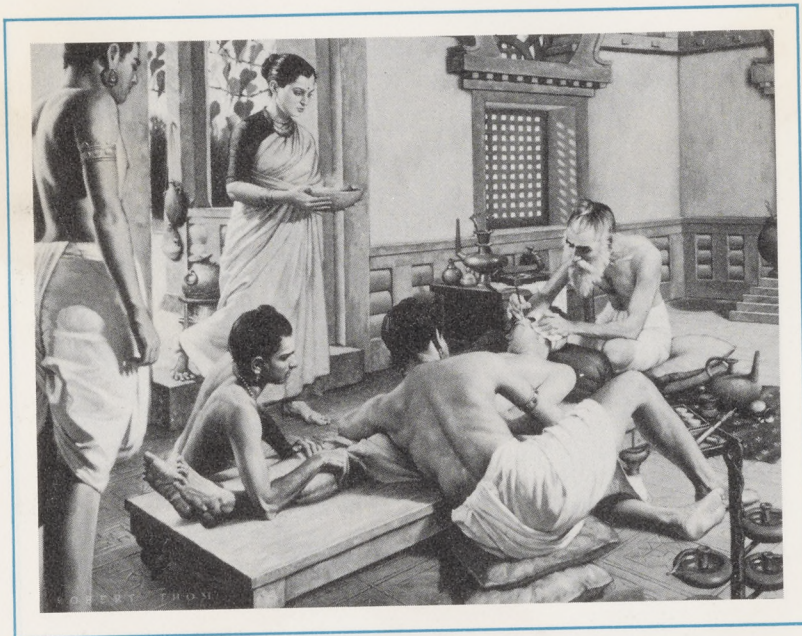




## RHAZES AND ARABIC MEDICINE

THE WEST is deeply indebted to medieval Arabs for preservation of ancient Greco-Roman knowledge during the Middle Ages, and for improving on it. Our numeral system and many words, such as alcohol, came from the East, as did many medical advances. Leaders in Arabic medicine were the Persians, Rhazes and Avicenna. Rhazes (865-925 A.D.), noted for keen observation and inventiveness, was first to describe measles and smallpox; to observe pupillary reaction to light; to use mercurial purgatives; and to publish a text on children's diseases. His teachings were very highly regarded for many centuries.





### SUŚRUTA: SURGEON OF OLD INDIA

SUŚRUTA, famed Hindu surgeon, is depicted in the home of a noble of ancient India, about to begin an otoplastic operation. The patient, drugged with wine, is steadied by friends and relatives as the great surgeon sets about fashioning an artificial ear lobe. He will use a section of flesh to be cut from the patient's cheek; it will be attached to the stump of the mutilated organ, treated with hemostatic powders, and bandaged. Details of this procedure, and of Suśruta's surgical instruments, are to be found in the *Suśruta-saṁhitā*, ancient Indian text. Plastic surgery was practiced in India more than 2000 years ago.





### SEMMELWEIS: DEFENDER OF MOTHERS

HUNGARIAN PHYSICIAN Ignaz Philipp Semmelweis (1818-1865), while Assistant at the First Obstetric Clinic of Vienna's great Allgemeine Krankenhaus in 1847, discovered means of preventing puerperal fever: he insisted that physicians and medical students wash their hands in chlorinated solution before entering obstetric wards and again before examining each patient. His rule was much resented and opposed—but hundreds of mothers' lives were saved. Though his doctrine was proved repeatedly, both in Vienna and in Budapest, most of his contemporaries opposed it; and, both depressed from worry and brokenhearted from disappointment, Semmelweis died at age 47, of blood poisoning, the infection he had fought so valiantly to prevent in his patients.

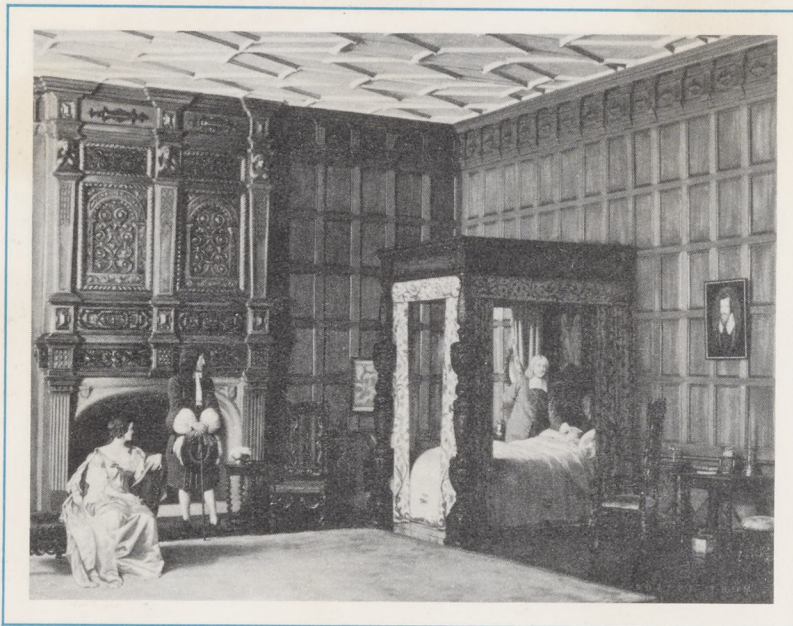




## LAENNEC AND THE STETHOSCOPE

THEOPHILE LAENNEC (1781-1826), young French physician, while at Necker Hospital, Paris, in 1816, devised foot-long hollow wooden cylinders for listening to sounds in patients' chests. These he called "stethoscopes." Comparing opinions formed during stethoscopic examinations with later findings at autopsy, Laennec learned to accurately diagnose many pathologic heart and lung conditions. His instrument and his published reports on its use were among the greater contributions to nineteenth-century medicine, helping physicians to understand pulmonary diseases—especially tuberculosis, the malady that ended Laennec's own short life.





## SYDENHAM AND CLINICAL MEDICINE

THOMAS SYDENHAM (1624-1689), seventeenth-century London physician, at the bedside of a patient—the only place, he believed, where doctors could learn about disease. Sydenham's plain Puritan costume contrasts markedly with high-fashion raiment worn by his lifelong friend, John Locke, physician-philosopher, who frequently accompanied him on his rounds of patients. Sydenham's honest and straightforward observations, accepted and published in many countries, earned him such posthumous titles as that of the "English Hippocrates," and the "Father of Clinical Medicine in Britain."





## HARVEY AND CIRCULATION OF BLOOD

WILLIAM HARVEY, slight, energetic, scientific English physician of the seventeenth century, with his famed pointer in hand, used demonstrations to prove his revolutionary theory of the circulation of blood, during his anatomical lectures before the College of Physicians of London. His book *De Motu Cordis*, published in 1628, upset traditional followers of Galen, brought entirely new concepts of circulation and of anatomy to medicine. Harvey, a graduate in medicine from Padua and Cambridge, physician to Kings James I and Charles I, was unperturbed by criticism, dedicated to research and to hard work. He died in 1657, after having seen his theory generally accepted by physicians.





### TREPHINING IN ANCIENT PERU

ON THE DRY, sunswept Pacific coastline of the Paracas peninsula, a first-century Peruvian surgeon is beginning a trephining operation with the aid of knives of glass-hard obsidian, a crude plant narcotic, cotton, and bandages. Assistants immobilize the patient, and a priest seeks supernatural intervention through incantations and prayers as the slow and highly hazardous operation proceeds. Peru was the center of intensive practice of trephining in the New World, where the operation (opening of the skulls of living patients) can be traced from well before dawn of the Christian era to the twentieth century.

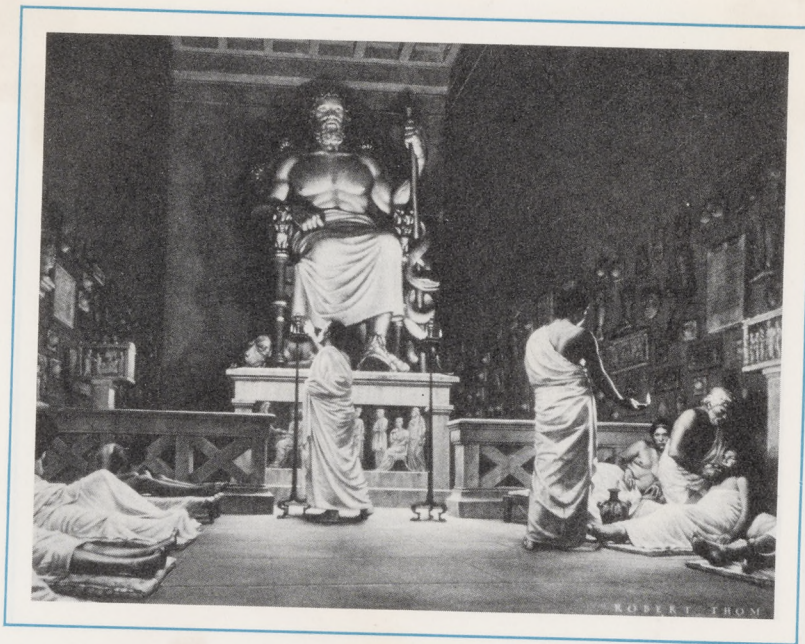




### MEDICINE IN ANCIENT EGYPT

AN Egyptian physician of the Eighteenth Dynasty (1500-1400 B.C.), clothed in clean white linen and a wig, as became the dignity of his status, is confronted with a patient having symptoms of lockjaw (described in an ancient scroll now known as the Edwin Smith papyrus). With sure, sympathetic hands, the physician treats the patient, who is supported by a "brick chair." Directions for treatment appear on the scroll held by his assistant. Specially trained priests observe prescribed magico-religious rites. Egyptian medicine occupied a dominant position in the world of the ancients for 2500 years.

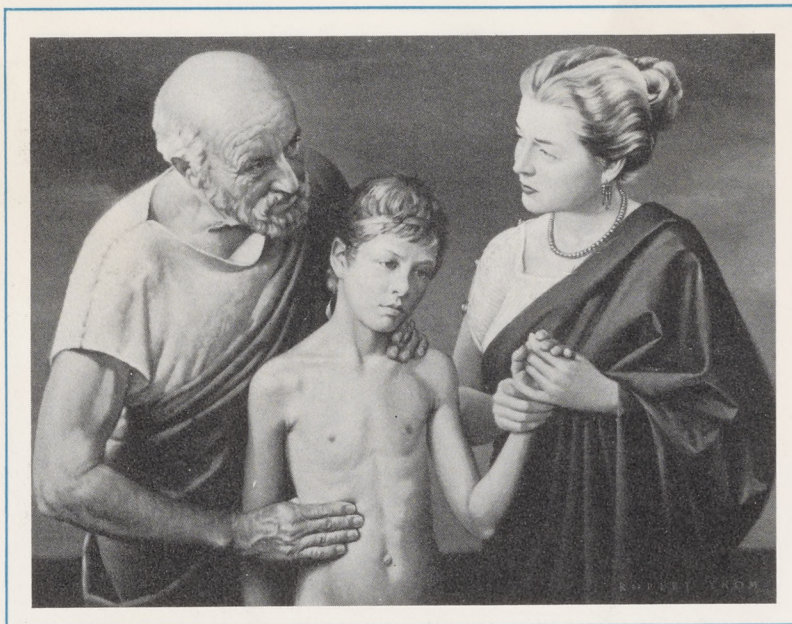




### THE TEMPLES AND CULT OF ASCLEPIUS

EVERY NIGHT for nearly a thousand years (500 B.C.-500 A.D.) sick and afflicted pilgrims flocked to the Grecian Temples of Asclepius to take part in a ritual called incubation. The ancient, kindly god of medicine was expected to visit them during a dream-state and either heal them or prescribe drugs, diet, and modes of treatment. Only requisites were that they should be clean and "think pure thoughts." To show their appreciation, recipients of Asclepius' favor caused votives (stone or terra cotta images of the afflicted parts which supposedly had been healed) to be made, suitably inscribed, and presented to be hung as testimony on the temple walls.





## HIPPOCRATES: MEDICINE BECOMES SCIENCE

THE ART of medicine in the ancient world developed to its highest point in Greece, during the millennium between 500 B.C. and 500 A.D. This creative period is symbolized by Hippocrates, the "Father of Medicine," whose name has come to represent the beauty, value, and dignity of medicine for all times. Hippocrates' kindness and concern are embodied in his aphorism, "Where there is love for mankind, there is love for the art of healing." These qualities are reflected in the face of this revered practitioner, scientist, and teacher, as he palpates a young patient and attempts to soothe a worried mother sometime late in the fifth century B.C.





## VESALIUS AND THE ANATOMY OF MAN

ANDREAS VESALIUS of Brussels, the first great teacher of anatomy from natural observations, conducted many anatomical demonstrations on human bodies while Professor of Surgery and of Anatomy at the University of Padua, 1537-1543. Highly successful, these were attended by medical students, physicians, interested civic officials, sculptors, and artists. First to break with Galen's 1400-year-old anatomical texts, Vesalius published *Tabulae Anatomicae Sex* in 1538, and in 1543, the monumental *De Humani Corporis Fabrica*. Though reviled and ridiculed by Galenists, Vesalius' works soon overcame his detractors and became classic in medical literature.





## RÖNTGEN: INVISIBLE RAYS SAVE LIVES

AT HIS first public demonstration of newly discovered x-rays, the evening of January 23, 1896, Wilhelm Conrad Röntgen (1845-1923) astounded scientists who filled the room. Professor of Physics and Rector of the University of Würzburg, Germany, Röntgen completed his demonstration by taking an x-ray photograph of the hand of the famed Professor of Anatomy, Albert von Kölliker. This led to discussion of possible medical applications. The news traveled fast, and within a year, x-ray equipment was being employed by medical men around the world as a diagnostic tool. Later research revealed many therapeutic, commercial, and industrial applications, as well as the hidden dangers, of x-rays.





### VIRCHOW AND CELLULAR PATHOLOGY

JUST PAST his thirty-fourth year, in 1855, Dr. Rudolf Virchow (1821-1902) while professor at Würzburg University, Germany, propounded his theory of cellular pathology. Lecturing and demonstrating at his specially made desk in the Würzburg Krankenhaus, the slight, short, fiery professor used microscopes to convince students that cells reproduced from other cells, and taught that disease results from disturbance of cells by injury or irritants. Later, in Berlin, Virchow continued to lead international medical thought, and to teach, to engage in research, to write, to edit, to explore new fields, and to serve his community politically, until his death.





### J. MARION SIMS: GYNECOLOGIC SURGEON

LITTLE did James Marion Sims, M.D., (1813-1883) dream, that summer day in 1845, as he prepared to examine the slave girl, Lucy, that he was launching himself on an international career as a gynecologic surgeon; or that he was to raise gynecology from virtually an unknown to a respected medical specialty. Nor did he realize that his crude back-yard hospital in Montgomery, Alabama, would be the forerunner of the nation's first Woman's Hospital, which Sims helped to establish in New York in 1855. Dr. Sims, who became a leader in gynecology in Europe as well as in the United States, served as president of The American Medical Association in 1875.



A prime example of  
Smythian humor  
at a  
Banquet in the  
Fifties.

### "THE QUEST FOR A CREST— THE GREAT SEAL OF THE DEAN"

The form is heart shaped, surmounted by a crown and three plumes, laterally supported by figurines and resting on a striped banner. Ideally portrayed in red and white, the banner is the traditional barber-surgeons pole, while half the heart and half the plumes are red, portraying the division of anemic medicine and sanguinous surgery.

The crown while symbolic of power also refers, in the vernacular, to the frequency with which associates of the Dean would like to "crown" him; the plumes while decorative refer to his constant use of the pen. The heart, symbolic of love and affection, is half white and half red, and the several segments into which it is divided permit the inclusion of significant expressions or symbols. The upper left segment

with the letters S.O.B. relates to the degree—not as you might think Baccalaureate—which is awarded for the advanced educational experience of a Dean. Immediately adjacent in the center is the caduceus—but literally known as the mugwump—with his mug in medicine, his



"THE SEAL OF THE DEAN"

wump in surgery. In the upper right segment is the erudite Latin expression which means "Don't let the bastards wear you down." Its reference is left to individual interpretation, Deans' or faculties.

The triangle on the left second row refers to the specialty of Deaning in Mathematical terms. Where the usual specialist is one who learns more and more about less and less, the Dean learns less and less about more and more. As a variable he approaches the limits of knowing nothing about everything. Opposite on the right is the street-scene symbol—borrowed from the former Dean of Stanford (Dr. Yank Chandler) "A Dean is to his faculty as the corner lamp post (let there be light) to the canine population."

Inspection of the portion of the heart so far described will reveal two stylized "rackets" of the game LaCrosse—one racket is surgery; the other medicine. The remaining portion of the heart is "not quite square" and is bisected to provide two triangles. In the upper triangle are the letters Alpha Iota Kappa. They do not represent a fraternal order but the Truman slogan "Am I confused!"

Completing the segments, the apical triangle of the heart—sharing both red and white portions, is the state of mind of Deans in general. "Daze without end." Finally, the two fauns supporting the heart are to be noted. Their sweet angelic facies are associated with large mulish ears alerted for rumor, and more ominously with clawed hand and cloven hoof. Any resemblance to academic or administrative bodies is purely intentional. (Copyright applied for.)



## ROTATING INTERNSHIP: PRO AND CON

The continuing stream of letters coming in to us on this topic clearly indicates the degree of sustained interest in the question. The great majority of letters favors the rotating internship, and the correspondents speak vigorously for it. Indeed, for this issue of the Bulletin we have not a single voice raised in defense of the straight internship. The editors feel that such a preponderance cannot represent the true state of affairs—though a few of them are very gleeful about the present state. How about your straight-internship adherents warming up your fountain-penns or typewriters to bring the balance into more proper equilibrium?

Certainly a medical school, and particularly a state university medical school, should provide education for both the specialist and the family physician; otherwise I think it subordinates itself to mere expediency. Therefore a rotating internship should be made available at our school.

However, I think this type of rotating internship for U. C. Hospital proposed by the "Pro" authorities is not a very sound one. The essential technical training in internal medicine is gained by the family physician, and it is not possible to provide training in the field of infectious diseases and the family physician without leaving much to be desired. The knowledge of and interest in infectious diseases is like a stamp without glue. In other words, the U. C. infectious disease service at the San Francisco Hospital needs to be incorporated into a rotating internship to offer a safe haven for those students who plan to enter general practice.

There is another point I would like to make. The concept of the "family physician" is usually identified with that of the general practitioner. However, the two concepts are not identical. It is becoming increasingly evident that a physician today cannot keep abreast simultaneously with developments in the treatment of even the most frequent disorders seen in the various branches of medicine. The concept of the general practitioner is becoming a concept of the past. The concept of the family physician, on the other hand, survives today as always the basic concept of the physician and is not affected by the process of progressive specialization. For as long as mankind will exist human beings will be individuals throughout the course of their lives. And it is the essence of the concept of the family physician to devote himself first to this task: to take care of people throughout their life spans, not merely at certain moments. It would seem, however, that with such a family physician as basic health consultant all emergencies would be handled satisfactorily and not emergency or "hot" cases would

A prime example of  
Gmptian error  
is a  
Parquet in the  
rattles.

## NEW STUDENT LOGIC

There are others who think that the training of a doctor should start with a very broad education with emphasis on the humanities as well as on the sciences. This period should be followed by a four-year course of basic training to be followed by a year or two of specialized training. Following such a course the student should be exposed to the specialties through a rotating internship and then specialize in his chosen field.

H. E. Thelander, M. D. (Guest)  
San Francisco

I have read with some interest the articles on Rotating Internships, pro and





32

### AGNES LENORE TERRY

From 1922 to 1959, the Medical School was profoundly influenced by the personality of Agnes Lenore Terry, Assistant to the Dean (later designated Senior Administrative Assistant). Many generations of medical students remember her efficiency and her ability, and all members of the faculty and non-academic staff were aware of her guiding hand.

Miss Terry was born near the Medical Center and attended Grattan School, which is less than a quarter of a mile away from the campus. One of her classmates in the second and third grades was Saxton Pope, Jr., who also was associated with the San Francisco campus for several years before becoming Senior Psychiatrist on the Berkeley campus. Miss Terry attended the University of California at Berkeley, and within a year after her graduation joined the staff of the Dean's office at the Medical School.

She worked with seven deans in the 36 years of her affiliation with the University. One of her greatest assets was her ability to adjust to the policies of each new administration, and another was her intense loyalty to each dean. After Langley Porter retired



AGNES LENORE TERRY

From 1922 to 1939, the Medical School was profoundly influenced by the personality of Agnes Lenore Terry, Assistant to the Dean (later designated Senior Administrative Assistant). Many generations of medical students remember her efficiency and her ability, and all members of the faculty and non-academic staff were aware of her

guiding hand.

Miss Terry was born near the Medical Center and attended Graceland School, which is less than a quarter of a mile away from the campus. One of her classmates in the second and third grades was Sexton Page, Jr., who also was associated with the San Francisco campus for several years before becoming Senior Psychologist on the Berkeley campus. Miss Terry attended the University of California at Berkeley, and within a year after her graduation joined the staff of the Dean's office at the Medical School.

She worked with seven deans in the 36 years of her affiliation with the University. One of her greatest assets was her ability to adjust to the policies of each new administration, and another was her intense loyalty to each dean. After Langley Porter retired



for the second time and President Robert Gordon Sproul stepped in as Acting Dean, Miss Terry was really the administrative officer of the Medical School, because the president, due to his extremely heavy commitments, was only able to come to the San Francisco campus two hours a week. She carried this heavy load efficiently until Francis Scott Smyth was appointed.

Miss Terry's principal interest in life was her work at the University, but it was by no means her entire life. Those who knew her well marvelled at her culinary ability and her grace as a hostess in her charming home. She had a very definite sense of style, good taste in clothes, and an appreciation for gracious living. Her diversions were travel and plays, and her great love was the opera, which she never missed.

Because of her dedication and devotion to her work at the University, she continued with her duties even during her terminal illness. She died in the spring of 1959, just four days after her last working day, bringing to an end a long and faithful affiliation with the school.



for the second time and President Robert Gordon Brown stepped in as

acting dean, Miss Terry was really the administrative officer of the

Medical School, because the president, due to his extremely heavy

commitments, was only able to come to the San Francisco campus two

hours a week. She carried this heavy load efficiently until Francis

Scott Smith was appointed.

Miss Terry's principal interest in life was her work at the

University, but it was by no means her entire life. Those who knew

her well marvelled at her culinary ability and her grace as a hostess

in her charming home. She had a very definite sense of style, good

taste in clothes, and an appreciation for gracious living. Her

diversions were travel and plays, and her great love was the opera,

which she never missed.

Because of her dedication and devotion to her work at the Uni-

versity, she continued with her duties even during her terminal ill-

ness. She died in the spring of 1959, just four days after her last

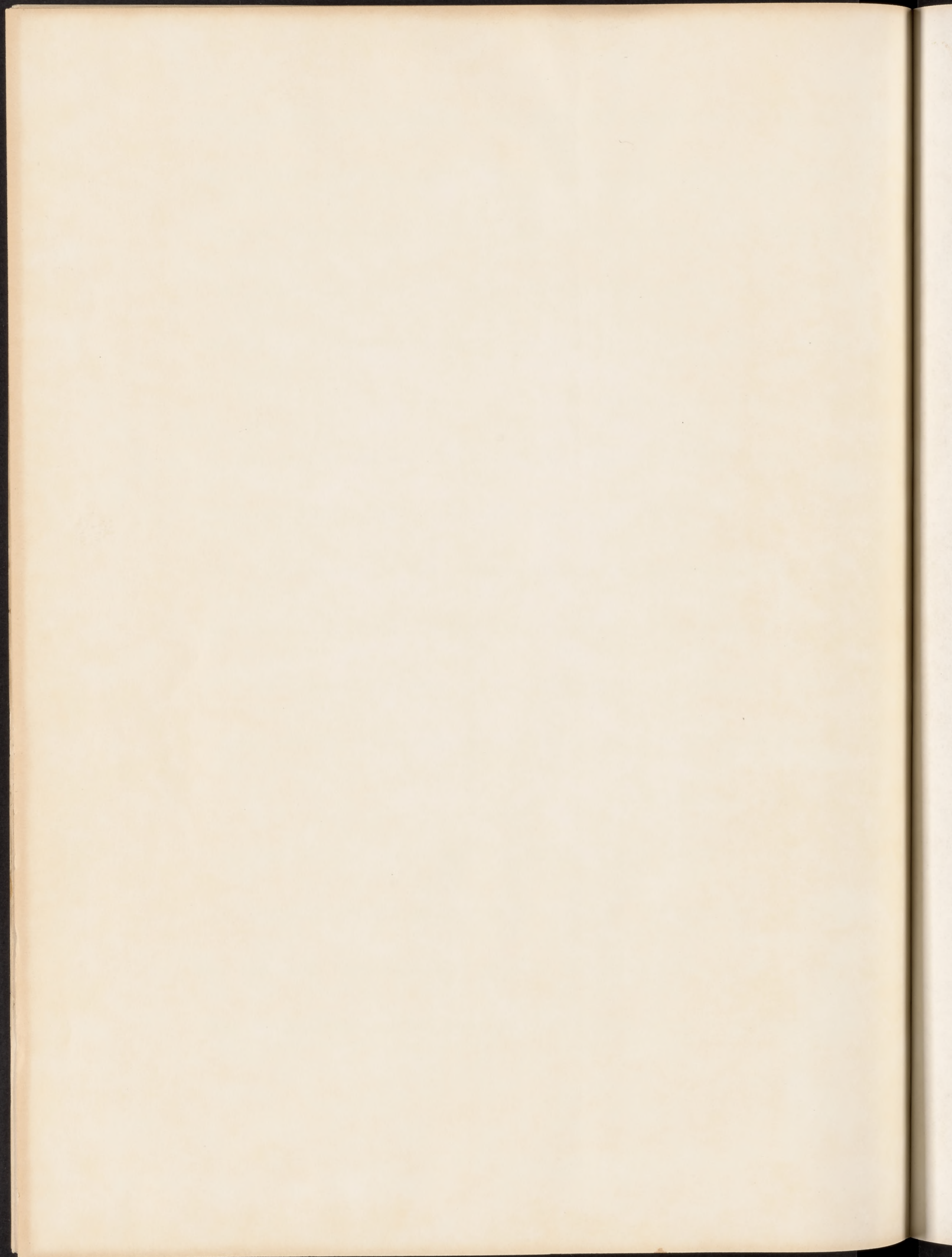
working day, bringing to an end a long and faithful affiliation with

the school.

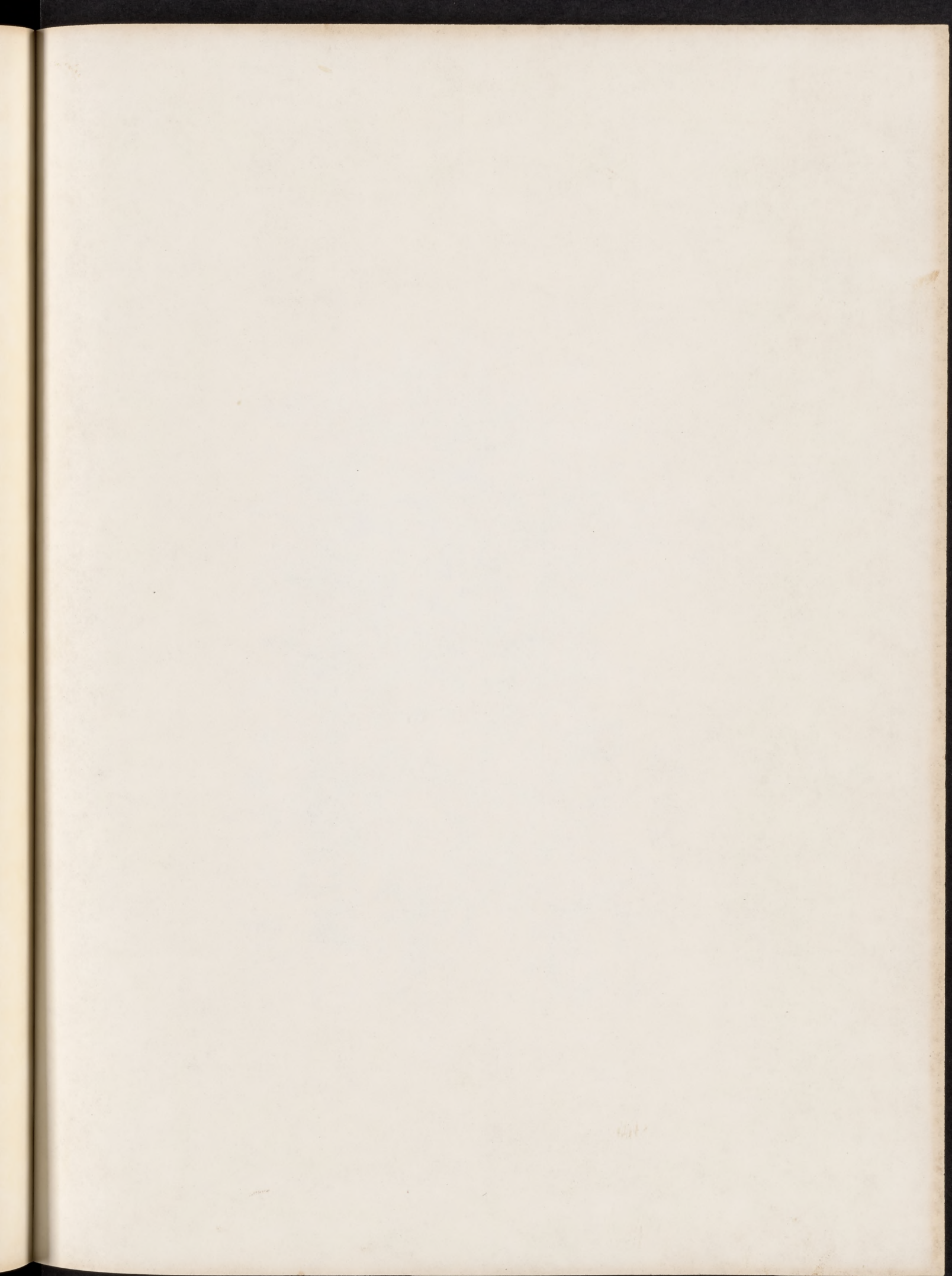




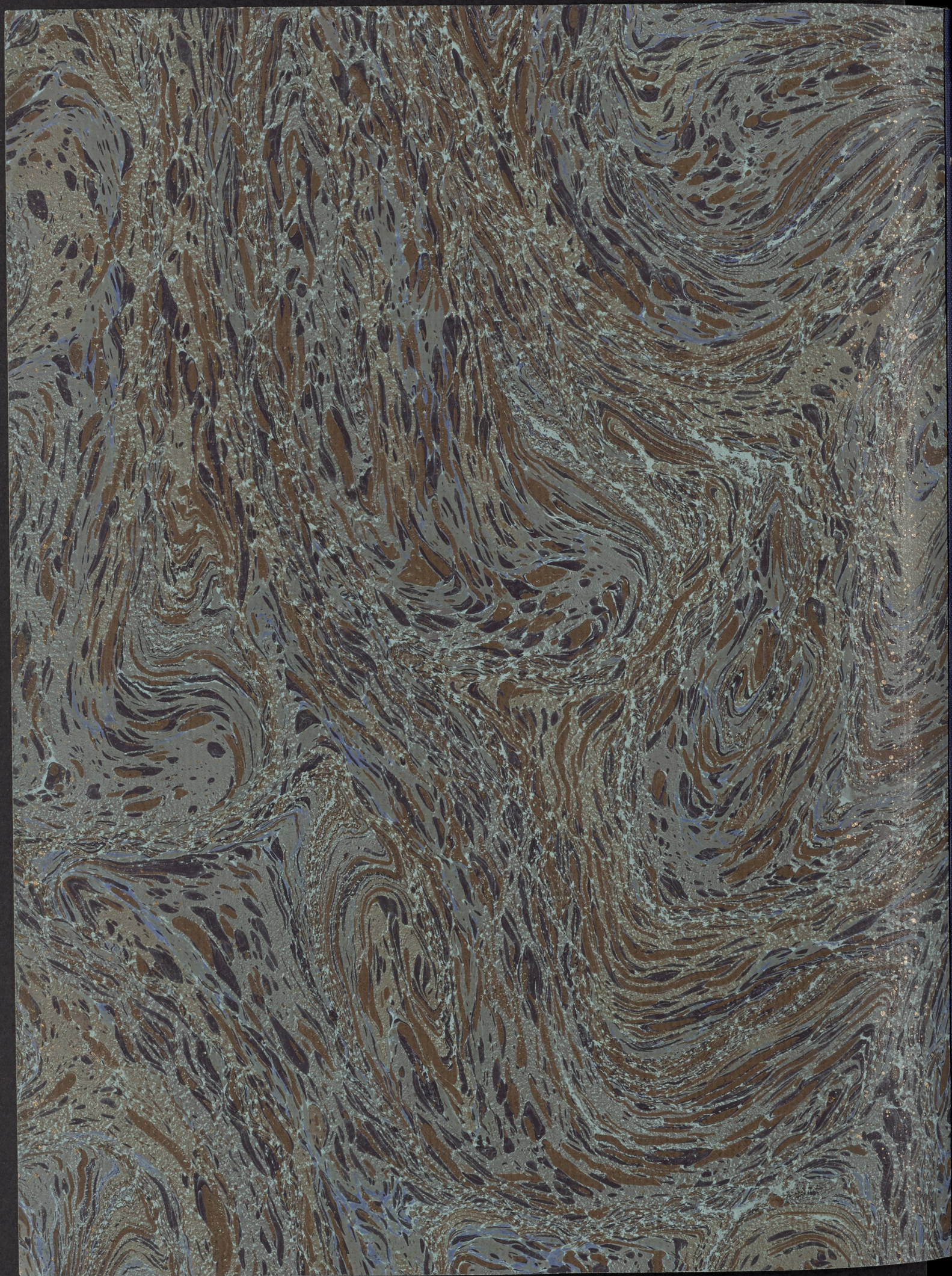






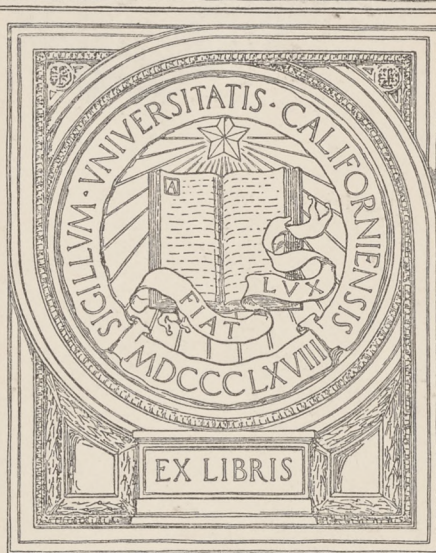








UNIVERSITY OF CALIFORNIA  
MEDICAL CENTER LIBRARY  
SAN FRANCISCO



ARCHIVES COLLECTION



100  
100

100  
100

100  
100

100  
100